1932

Health education in Montana Catholic schools

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The University of Montana

HEALTH EDUCATION

IN

MONTANA CATHOLIC SCHOOLS

by

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Presented in partial fulfillment of the
requirement for the degree of
Master of Arts

State University of Montana

1932

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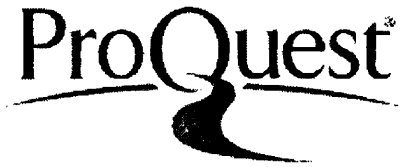

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ACKNOWLEDGMENTS

The writer desires to take this opportunity to express her sincere gratitude and appreciation to her advisor, Dean Freeman Daughters of the School of Education of the University of Montana, who suggested this investigation, for all guidance, suggestions, criticisms, and encouraging interest.

This study is fundamentally a co-operative one. The responses to the questionnaire are given by the principals of the different schools and the superiors of the various religious houses in the State of Montana. Without their co-operation, this thesis could not have been possible. The writer's deep obligation is acknowledged to all those answering the questionnaire and also to all those who sent letters.

Gratitude is particularly due to Dr. F. D. Pease, Missoula County Health Officer, for the loan of helpful printed material and also to Sister Lucia, Principal of Sacred Heart Academy, Missoula, for reading the entire manuscript and offering helpful suggestions.

Grateful and appreciative acknowledgment is made to Miss Lucia B. Mirrielees of the English Department of the University of Montana for reading the thesis and making valuable criticisms and suggestions.

The writer is most deeply grateful and appreciative to her Superiors for permitting her to enjoy some of the advantages offered by the University of Montana. She is most indebted to them not only for their interest in this thesis but also for all scholastic and other privileges granted her enabling her to undertake the investigation and to write this thesis.

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CHAPTER I

INTRODUCTION

Section I

Health education has for object a preventive, corrective, and protective influence upon the child. The result looked for is a physically, mentally, morally, socially, and vocationally efficient individual - a healthy person at his best. To attain this end it provides school equipment and management placing no limitations to the desired healthy vitality. It spares no effort to give the child all the experiences necessary toward the upbuilding of good habits, correct attitudes, and right health knowledge. It treats diseases and corrects all obstacles to physical well-being. It places emphasis upon hygienic activities as means of development toward a strong, vigorous body. It has for its goal a condition of the body that makes possible the highest enjoyment of life, the greatest constructive work, the best service. Hence, health education is very significant.

Since health education is now largely relegated to

the schools, it devolves upon educators to concern themselves respecting the health of school children, its conservation, protection, and supervision. We ask ourselves the question, "What attention are the Montana Catholic schools giving to the important matter of health education?" The present thesis attempts to present data collected to answer this question. But before proceeding further, it may be well at this point to define health education and to state the essentials in a health program together with what these essentials provide.

Definition of Health Education

Health education as defined by Dr. Thomas Wood of Columbia University is "the sum of experiences in the school and elsewhere which favorably influence habits, attitudes, and knowledge related to individual and community health."[1] If interpreted in accordance with this definition, health education is not limited only to training and instruction in health habits. It necessarily takes into account all the experiences impinging on the child night and day twenty-four hours of the day; in other words, the entire life of the individual. It includes

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1. Dr. Thomas Wood quoted in A Health Education Procedure for the Grades and Grade Teachers by Kathleen Wilkinson Wootten (New York, 1926), p. 4.

also all his human relationships. Consequently, health education is comprehensive. It cannot do other than cover the entire health program.

Essentials in a Health Program

Kathleen Wilkinson Wootten on page 4 in her book, "A Health Education Procedure for the Grades and Grade Teachers," gives the following as some of the most important contacts and measures contributing toward the better health of school children.

1. "Health legislation (home, school, industrial, and public health laws.)
2. School hygiene, including sanitary, hygienic, and safe conditions in school buildings, and on school grounds; sufficient play space; school feeding; and hygienic instruction.
3. School health supervision with adequate provision for the correction of individual physical defects. (Full time school physician and nurses, dental clinics; ear, eye, nose, and throat clinics; speech and mental clinics.)
4. Special classes for the various groups of handicapped children.
5. Physical education, including supervised play indoors and outdoors, athletics, corrective gymnastics, relief drills, rhythmic interpretation, folk dances.
6. Safety education.
7. Health instruction and training in school and outside of school.
8. Child study clubs for parents and teachers."

These statements would seem to indicate that the

essentials in a health program should include

1. Provision for a healthful school environment;
2. Inclusive health instruction;
3. The health supervision of the school child;
4. Physical education;
5. Safety education; and
6. The whole-hearted cooperation of the parent and the community.

This, it is believed, should make for a well-rounded school health service. Though it is not and cannot be accomplished all at once by each and every school, it should be the goal to which each school should aim.

Provision for Healthful School Environment

School hygiene provides for sanitary, hygienic, and safe conditions in school buildings and on school grounds. It watches constantly to keep the building clean, free from unwholesome odors, properly ventilated, and properly lighted. In fine, it prevents or corrects all unsanitary conditions in the management of the school plant.

Provision for Health Instruction

The hygiene of instruction concerns itself with all the environmental conditions that encourage good physical, good mental health, the power of concentration and clear

thinking, and a normal social life. It enforces the principles taught. Precept is less potent than practice. It gives all pupils an equal opportunity to form proper habits and to develop wholesome attitudes concerning home relationships and the right use of leisure, to hold vocation and avocation in their proper relationship, to develop desirable social and moral qualities, breadth of view, optimism, and scientific appreciations.

To control worry by steadfastly refusing to worry over little things, to avoid fears by early abstience from all indulgence of fear, to surmount an irascible temper, a moody disposition, or an introspective manner by constantly seeking early and at all times for controlled expression, cheerfulness in life, and the needs of others - these are the results of training.

Provision for Health Supervision

Training in healthy living alone does not suffice. Anatomical and physiological abnormalities may be present or may creep in and health instruction only will not eradicate them. Health supervision is consequently needed. It makes adequate provision for the correction of individual defects, making use of a physician and nurses, together with the various clinics. This protective function of the school also provides for individual medical examinations

followed by a course of supervision. Health examinations are in themselves an education for the child, the parent, and the teacher.

Provision for Physical Education

In addition to the health supervision of the school child, the question of physical education should be seriously taken. Physical education may be defined as the scientific training of the child in such fashion as to obtain the best possible development of his bodily powers. It includes all exercises which are a necessary and desirable factor in the physical development of all children. It does not exclude systematized outdoor and indoor play.

Even as the school develops the child's mental capacities and abilities, so also must it supply each and every child the occasions and opportunities for an exhibition of his maximum prowess. In all the work of physical education, sight of the touchstone of individual improvement must never be lost.

Provision for Safety Education

Together with the phases of health education discussed above, the school should correlate safety education. The best results are achieved when safety education has a regular place on the school program. In this, the child is

given a consciousness of accident situations and an opportunity to acquire habits of order, carefulness, and respect for law during his plastic school days. "Ignorance", "Carelessness", and "Indifference" are causes of accidents as well as of disease.

Provision for Parent and Community Cooperation

The part of the parents in the program of health education is deserving of special attention. Those who are ultimately responsible for the health of the child are the parents. In this country they have the final word with regard to the bodily welfare of the child, except in the case of infectious diseases. The parents are those who decide whether defects shall be remedied or not. Without their aid and sympathy, it is hardly likely that the maximum good can result. It is only in active cooperation between home and school that ideals and standards are established in terms of health practice.

Moreover, the corrective work should be done by the family doctor and paid for by the parents. If the parents are poor, the children should nevertheless be provided for by the clinics of the Health Department, or by semi-public organizations. The cooperation of local and community organizations is, therefore, to be desired and sought.

Section II

Problem for Solution

This consideration of the essentials and what they provide serves to introduce the investigation of health education in Montana Catholic Schools. To what extent and what these schools are doing toward the realization of the desired result of health education by providing for a healthful school environment, by giving inclusive health instruction, by making use of all possible facilities for the health supervision of pupils, and by securing the whole-hearted cooperation of parents, local agencies, and community organizations, constitutes the problem which will be treated in this thesis. Catholic educators believe that the corporeal nature of the child should receive due recognition with the spiritual and mental and that health education is a fundamental part of the child's training. They evince a desire to accord it the place it merits in the curricula. To find the extent to which this is done in the Montana Catholic Schools is an object of this thesis. It may not, however, be out of place to suggest that an investigation of this nature may be of value in reminding them of the importance of this phase of their work and in spurring them to bring to a higher level the present conditions with the limited resources at their disposal.

Object of investigation

Notwithstanding the widespread interest in health education in the Catholic schools in general as evidenced by writings in Catholic periodicals and school magazines, and notwithstanding the amount of thought being devoted to the question and the great amount of work of excellent character being done in many higher Catholic schools in fields of medical inspection, physical education, and instruction, no extensive study of this field in Catholic schools has yet been undertaken particularly in Montana. Limited investigations have taken place in St. Louis, Los Angeles, San Francisco, and New York.[1] In view of this fact, an inquiry into the immediate and practical problem as related to primary and secondary Montana Catholic schools seemed particularly timely. The writer has accordingly made it the object of an investigation which attempts to discover, if possible, what is being done in health education as above outlined and to what extent that work is being done. The writer hopes that the findings may serve as a working basis in the improvement of health education in the Catholic schools in the State. The investigation is limited to Montana, since, if carried on in

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1. Reports of these are in Appendices IX, X, XI, and XII. These are intended for ready reference.

many states, it should prove too extensive.

Investigation by Questionnaire

For the purpose of this investigation, the questionnaire was used as one of the possible means of obtaining information from the principals and superiors. Since these officers have supervisory duties they necessarily come in frequent contact with both pupils and teachers, thereby getting the viewpoints of both. They are consequently the ones who can give the most reliable information of what is going on in their schools. It is necessary that those answering the questionnaire come in close contact with the pupils. The problem is related to the physical welfare of these pupils. They are the ones being taught. It is their bodies which will profit by the health education given them or suffer by the lack of such education. It is also necessary that those answering the questionnaire should come in contact with the teachers. Teachers actively engaged in health teaching understand the pupils' problems, realize their needs, and have an opportunity to learn their pupils' interests in health matters. Their wealth of practical classroom experience should enable them to sense the value of certain content; to assist in the arrangement and grade placement of health instruction materials; to suggest methods for realizing objec-

tives which have been set up as desirable in health education.

Personal investigation would have been preferred. But such an investigation was impracticable. The schools are too scattered. The time involved and the necessary expense did not permit of such an investigation. The data, therefore, for the entire investigation was secured by means of the questionnaire either from the principals of the schools or from the superiors of the religious houses in charge of the schools under investigation.

Scope of Questionnaire

The questionnaire attempts to find out, in a general way, what is being done and to what extent the work is being done in health instruction, in health service, and in physical education. Its scope was determined largely by the study of the following books:

A Health Education Procedure by Kathleen W. Wootten;

The Hygiene of the School Child by Lewis M. Terman;

School Hygiene by Edward R. Shaw;

Health Through the School Day by Mary E. Spencer, M.A.;

"The Children's Charter";[1]

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1. United States Daily, published by the United States Daily Corporation (Washington, D. C.) Dec. 26, 1931; Page 1 and 3.

"Physical Welfare of Student" by Harrison C. Lyseth;[1] and

The Physical Nature of the Child by Stuart H.Rowe,Ph.D.

The questionnaire is given in full in Appendix I.

Limitations of Questionnaire

The writer is cognizant of the limitations of the questionnaire-method of collecting data. Data secured through this method are always open to objection and must, as all data, be interpreted with care. No claim is consequently made that the results are highly objective in the strictest sense. The results, for this reason, are not here presented as something to be accepted as final, but as something worthy of consideration.

Reliability of Questionnaire

The specific purpose of the study was the securing of material that could be used as a working basis toward improvement. It was consequently believed that investigation by questionnaire is as reliable in this field as when employed for similar studies in other fields. Moreover, since persons qualified by being in positions of authority make

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1. United States Daily published by the United States Daily Corporation, (Washington, D. C.) Dec.26, 1930; p. 12.

the responses, the information given represents the best judgment of these individuals. The responses to the questionnaire are consequently reasonably valid and reliable.

Many of the questions were not answered at all. Such will be given place in the tables. The only indefinite answers were those stating the years for which the report replies and those in answer to health-service question thirty-five. A few understood the former question to mean school years rather than annual time. Many, it is feared, did not understand the latter question.

Sources of Data

The investigation was first undertaken in the spring of 1931. Letters explaining the object and questionnaires were sent to the principals of the parochial schools and to the superiors of the private Catholic schools. Altogether there were forty. Thirty-six of these schools responded; six by letter and thirty by answering the questionnaire. Eight of the latter made response to a second request. No questionnaire was sent to two of the schools. These two are well known to the writer.

The returns from the study represent eighteen countries, fourteen cities, five Indian Missions, and thirty-eight schools. Thirty-three schools are taught by religious communities of women; five, by religious communities of men.

Eight of the schools are Indian schools; two are orphanages and one is a hospital school for crippled children. There are 7,245 children in attendance.

Table I gives the distribution of schools by counties; Table II, the distribution of pupils by schools; Table III, the types of schools as regards control; Table IV, the types as regards grades; and Table V, the types as regards differentiated groups.

The names of the schools investigated in this study are given in Appendix II.

TABLE I. DISTRIBUTION OF SCHOOLS BY COUNTIES

Name of County	Number of Schools
Big Horn	1
Blaine	2
Cascade	3
Custer	1
Deerlodge	2
Flathead	1
Glacier	1
Gallatin	1
Hill	1
Lake	2

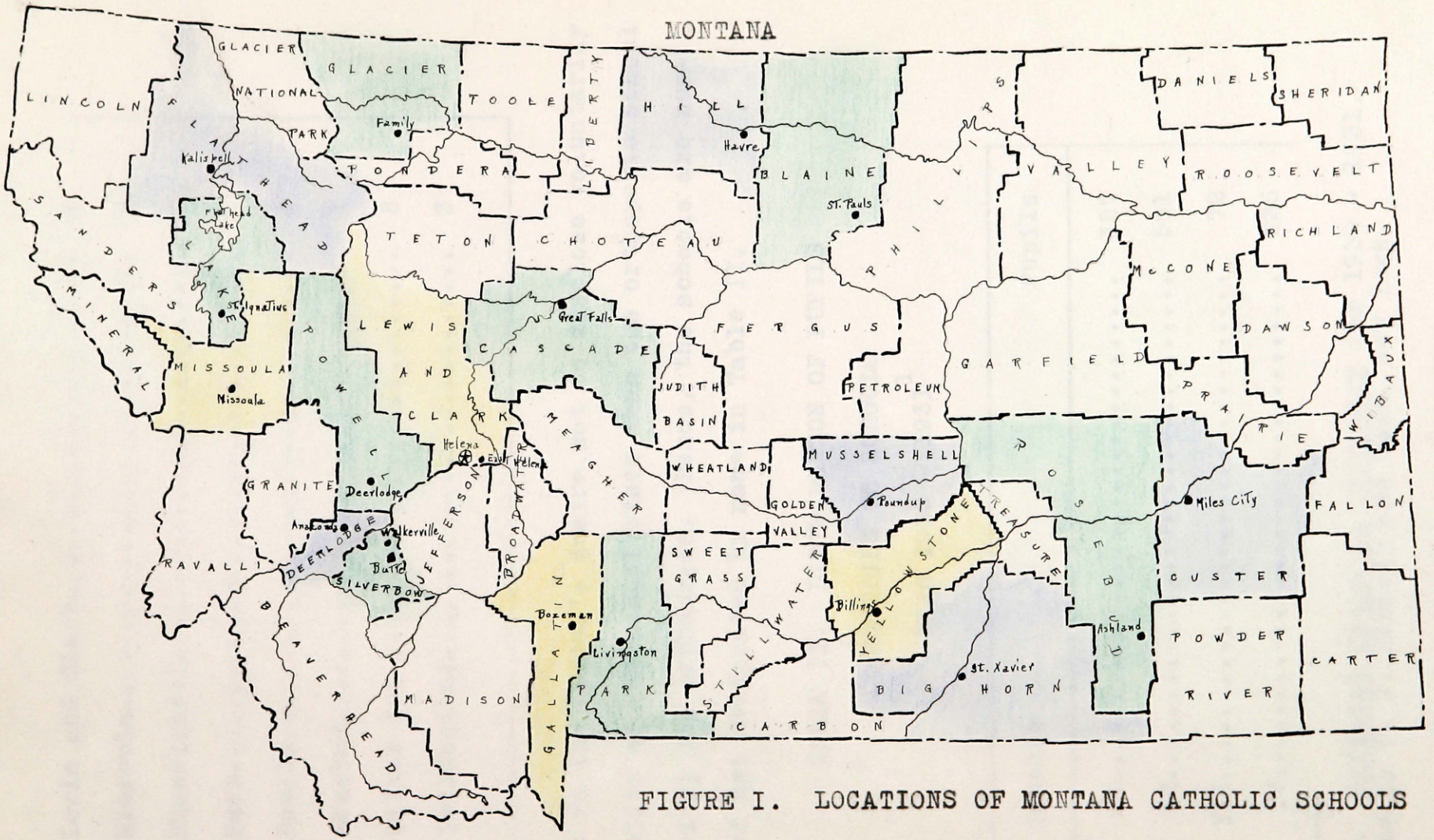

FIGURE I. LOCATIONS OF MONTANA CATHOLIC SCHOOLS

The counties represented in the investigation are colored.

Lewis and Clark	4
Missoula	4
Musselshell	1
Park	1
Powell	1
Rosebud	1
Silver Bow	8
Yellowstone	3

It is the writer's desire not to disclose voluntarily the identity of any school other than the orthopedic school and possibly the orphanages. Hence, the schools are numbered and not designated by name in Table II.

TABLE II. DISTRIBUTION OF PUPILS
ACCORDING TO SCHOOLS
YEAR 1930 - 1931[1]

Schools	Pupils
I	357
II	501
III	72
IV	225

1. Official Catholic Directory for 1930 - 1931, published by P. J. Kennedy and Sons, New York.

V	85
VI	23
VII	181
VIII	275
IX	250
X	205
XI	338
XII	175
XIII	317
XIV	421
XV	106
XVI	381
XVII	203
XVIII	357
XIX	376
XX	59
XXI	328
XXII	110
XXIII	101
XXIV	58
XXV	34
XXVI	160
XXVII	150
XXVIII	155
XXIX	69

XXX.....	150
XXXI.....	290
XXXII.....	175
XXXIII.....	60
XXXIV.....	91
XXXV.....	70
XXXVI.....	63
XXXVII.....	188
XXXVIII.....	86
Total.....	7245

TABLE III. CONTROL TYPES OF SCHOOLS

Schools	Boys	Girls	Co-educational	Total
Parochial.....	1	0	21	22
Inter-parochial. (Central).....	1	1	0	2
Private.....	3	5	6	14

TABLE IV. CLASSIFICATION TYPES OF SCHOOLS

Schools	Boys	Girls	Co-educational	Total
Primary.....	3	3	20	26
Secondary.....	2	3	0	5
Primary and Secondary (Unit).	0	0	7	7

TABLE V. DIFFERENTIATED GROUPING OF SCHOOLS

Schools	Boys	Girls	Co-educational	Total
Resident Pupils; Grade School.....	2	4	2	8
Resident Pupils; High School.....	0	1	0	1
Resident Pupils; Grade and High School (Unit)....	0	1	5	6
Day School; Grade School....	1	0	17	18
Day School; High School.....	2	1	0	3
Day School; Grades and High School (Unit)....	0	0	2	2

In those co-educational schools having resident pupils in both grade and high school, boys are excluded from residence at the school after the age of twelve. These boys may attend classes until the completion of the eighth grade. They are not permitted to attend the classes in the high school department except by special concession. This is true of all dormitory schools taught by congregations of religious women. In the case of day schools, no restriction is placed on the attendance of boys in the high school department. It is generally preferred, however, that whenever possible, the boys of high school age attend schools conducted by religious congregations of men. This study includes two such schools.

Treatment of Data

The method of treating the data from these sources is both statistical and discoursive. Summary tables, either accompanied or followed by necessary interpretations, are used for the presentation of all data collected.[1]

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1. The percentage frequency is used in preference to the number of schools except in a few tables. This frequency is found by dividing the number of schools giving the response by the number of schools under consideration.

Purpose of Thesis

The presentation of the findings of the questionnaire is the immediate purpose of this thesis. It treats of the essentials in a health program working toward the realization of healthy, cheerful, energetic members of society and the ideal of living most and serving best. It is confined to all that in the school contributes in any way to the growth of the pupils in a normal, healthy life. This work makes no attempt to outline a course in health education or to evaluate present courses of study. It does seek, however, to present in turn the findings relative to school environment, to health instruction, to safety education, to the health supervision of the school child, to physical education, and to parent and community cooperation. The replies to the questionnaire readily lend themselves to these classifications.

Scope of Thesis

This thesis limits itself to Montana Catholic Schools, primary and secondary considered as a unit, strictly to an examination of present conditions and a presentation of facts as a preparatory step to further research and to experimentation in the selection and organization of health education content for these schools. The Catholic college,

the Catholic hospital training schools, and the Catholic industrial school for girls are not under investigation. The orthopedic school is not considered with the other schools, but is given a prominent place in Chapter IV. A history of the work of this school is found in Appendix VIII.

Time of Reports

The years for which this report replies are revealed in Table VI.

TABLE VI. TIME OF REPORTS

Years	Percentage of schools reporting
1930 - 1931.....	21
1925 - 1931.....	2.6
1926 - 1930.....	2.6
1928 - 1931.....	2.6
1927 - 1931.....	5.2
1921 - 1931.....	5.2
1930 - 1932.....	5.2
1929 - 1932.....	15.6
1912 - 1932.....	2.6
1923 - 1931.....	2.6

1922 - 1931.....	2.6
1910 - 1931.....	2.6
1924 - 1931.....	7.8
Giving answers in terms of grades rather than, years.....	21.8

The reports from a certain year to 1932 were sent to the writer this present year in the early spring.

In some schools the teachers are changed frequently. What was accomplished in the years previous to the teaching of the present corps is not definitely known. In those in which the teachers are not transferred so frequently from one school to another, the policy in health education is given for longer periods of time. In any case, the past year or two are those under consideration.

CHAPTER II

SCHOOL HYGIENE

As stated in Chapter I, school hygiene provides for sanitary, hygienic, and safe conditions in school buildings and on school grounds, for school feeding, and for healthful instruction. Environmental conditions which should encourage physical health are treated in the present chapter. All material relative to healthful instruction is presented in the following chapter.

The school plant is itself a potent influence in the health of the child. Consequently, it is the duty of the school to furnish an excellent building. But alas! it only too frequently happens that architects are trusted in making decisions as to what is good and what is bad in the matter of school building. The builders are only too prone to sacrifice the welfare of the children to the exterior lines of their creations. Many of them seem to have no further conception of what is required in a modern school then what is stipulated by the building code. The result is that teachers must do the best they can in coping with unsuitable or poor building arrangements.

Adequate Rooms

In answer to the question, "Do all classrooms measure up to the best standards of health in regard to temperature, ventilation, and light, eighty-nine percent of the schools gave answer in the affirmative; three percent in the negative; and eight percent omitted to make any statement. In most instances the rooms are spacious, well ventilated, and well lighted. In one school a crowded condition exists but in one room only. The letter describing the situation states that the locality is poor and behind the times. The correspondent writes, "Under the present conditions no better arrangements are possible." To ask for more spaciousness and assistance in that particular place is like crying for the moon.

Open Air Rooms

None of the buildings are provided with open air rooms. Fifty-seven percent of the school officers make admission in the negative. Fifty-six percent of the buildings have rooms in which the windows are kept open in all weathers. Thirty-two percent of the principals and superiors stated that though there are no rooms for this special purpose only, the classrooms regulate the opening and closing of windows. No restriction is placed upon their liberty in this respect. All rooms having windows to the left and to the rear of the

pupils always insure open windows on both sides in good weather. If because of winds or storms the windows on one side must be closed, those on the other side are open.

Seating Equipment

Forty percent of the schools are provided with adjustable seats and desks throughout the entire building. In thirty-five percent there are adjustable seats and desks in some of the classrooms. In twenty-five percent there are desks of the same size and non-adjustable. Three percent of those answering the questionnaire are silent regarding this feature of the equipment. As a general rule, non-adjustable desks and seats are found.

Children within the same class are never the same size. If desks and seats are all the same and not capable of adjustment, some of the children have to work in desks that are either too large or too small for them. It is better to have some adjustable desks and seats in each room than to have all those adjustable and all those non-adjustable in one or several rooms. Blocks should be used and are used in three percent of the buildings for children whose feet do not touch the floor. To alleviate the situation in three percent of the buildings, some larger desks and some smaller desks are placed in each room to accommodate children unusually large or small for the class in attendance.

Toilet Facilities

Data relative to toilet facilities and supplies appears in Table VII, which gives the percentages of schools responding and not responding to the questions dealing with the topic.

TABLE VII. TOILET FACILITIES

	Percent giving affirmative response	Percent giving negative response	Percent giving no response
Sanitary fountains or drinking cups...	86	0	14
Pure drinking water.....	84	3	13
Washing facilities.	92	3	5
Paper towels supplied by the school.....	54	10	36
Sanitary toilets...	95	0	5
Bath rooms or shower baths.....	36	28	36

In a few localities, particularly in the Indian Missions, the only source of water is either the well, the spring, or the running stream. Schools located in such places do not always find it possible to control completely the purity of the drinking water supply. They do what they

reasonably can by operating the water system in as sanitary a manner as possible and by properly controlling all environmental factors which pollute the supply and by observing the Montana regulations concerning private water supplies.

The newer buildings, particularly those having gymnasiums, have shower baths to which children have access. The orphanages and all schools having resident pupils are well supplied with either bathrooms or shower baths. Twenty-five percent of their number are supplied with both.

No period is allotted for regular bathing. However, no child is refused permission to use the bathroom or shower bath.

Health Equipment

Responses to all questions on health equipment are given in Table VIII. These are not so favorable as they might be. This condition may be due to the fact that a full program of health supervision has not yet been introduced into the schools and the work is not so well organized.

TABLE VIII. HEALTH EQUIPMENT

	Percnet of schools equipped	Percnet of schools not equipped	Percent of schools making no mention of such equipment
Suitable room in which health or school nurse may work.....	67	30	3
Scales.....	46	18	36
Tape measures.....	48.5	13	38.5
Vision chart.....	32	16	52
Watch for hearing test.....	16	30	54
Pole for posture test.....	16	18	66
Classroom weight chart.....	32	16	52

Replies from twelve percent of the schools indicate that equipment such as scales, measures, vision charts, and loud ticking watches for hearing tests are in the doctors' offices. Three percent state that all this material is in the Health Department. These schools borrow the materials and use them according to need. Six percent of the schools borrow needed equipment from the hospital training schools. One percent assert that such articles are to be had in the

office of the school nurse. She brings them with her when she makes her visits.

Infirmary Equipment

Seventy-five percent of schools having resident pupils and all the orphanges are supplied with medicines and infirmary equipment. The supplies of medicine in these types of schools are kept in the infirmary. These are open at all times with a sister infirmarian, a trained nurse, practically always present and available. Children go to the infirmary for medicine or pills at certain stated times and may go at any time they need care by asking permission of the prefect of resident pupils and, in case of day pupils, either of the teacher or principal. The infirmaries and the medicine chests are equipped to take care of all minor difficulties. Prescriptions are always sent to the pharmacy at the nearby hospital or to the designated drug store.

One children's infirmary is located on the first floor of a building separate from the main building. It has one ward for boys and two for girls. Food is prepared in the main kitchen of the school. But the infirmary has a small diet kitchen where special dishes can be prepared, and a table at which children who are not bedridden may eat their meals. In addition to a medicine cabinet, it has a bath-

room with one tub, two toilets, one sink for washing, and a supply of wash bowls and large pitchers. The cupboards and supply closets are well supplied and equipped with linens, hot water bottles, ice packs, and other necessary equipment. This infirmary is complete in its facilities for the care of school children.

Those children having colds and minor respiratory diseases are taken care of in this infirmary; but should any have contagious or infectious diseases, they are treated and kept in a small building for that special use. Owing to the advance made in preventive medicine, this building has not been used for isolation purposes for the last decade.

The physician comes to this infirmary whenever called.

The orphanage under the supervision of the same religious body as the resident school whose conveniences for the care of sick children has just been described, has like apparatus, furnishings, and service. The infirmary in this home is located on the second floor of an annex to the main building. It consists of six wards, large enough to contain from four to six beds each. Every ward has at least three large windows. There are three bathrooms, a hall with medicine cupboards, a pantry, and a serving room. In the last two mentioned are a gas stove, an ice box, and a sink.

In case of contagion, isolation is possible. In extreme cases, the city takes the patient.

There is a sister registered nurse in charge of the health of all the children of the home. She makes daily visits to all the departments of the children. She has the children go to the infirmary at stated times for dressings, medicines, pills, and for attention to other needs. This sister nurse has an assistant in order that there may always be someone in the infirmary to supervise or to answer calls.

There is no definite immediate information at hand relative to this phase of health work in twenty-five percent of schools having resident pupils and orphans. The writer has ever reason to believe, however, that pupils in the resident schools are well taken care of in their illnesses, else such schools would soon lose their pupils. The orphans have relatives and friends, people interested in them, who should soon have these children removed elsewhere if the care in sickness given them were not what it should be.

In the day schools taught by people specializing in teaching only and having no hospitals or no special training in nursing, the situation is somewhat different. The need in such schools for a well-equipped medicine chest is not so keenly felt. It is pleasing to note, however, that forty-three percent of these schools have medicine supplies, at least emergency kits. Thirteen percent do not have them.

Fifty-four percent fail to express themselves one way or the other in this respect.

Pre-school Education

The kindergarten is often considered as isolated from the school, whereas it is a part of the school. It is the first step in formal education. It is the experience of those individuals earnestly engaged in kindergarten education that they are repeatedly surprised at the new channels of pleasing instruction which are opened before them. They find that the children advance rapidly in intellect and knowledge and develop physically in a harmonious manner.

The kindergarten should be recognized as having an important relation to the home. It transfers the child from the home to the school. Its gifts and occupations are in part related to the home. One of its objects is the inculcation of home ideals. Its mothers' meetings directly affect home betterment.

Twelve Montana Catholic Schools are using the kindergarten and nursery to advantage. It is interesting to note that these features are principally in connection with schools having either resident pupils or orphans. Children are admitted to the nursery at the age of two or three years. One of the orphanages, however, has a nursery only and no kindergarten.

To undertake successfully the management of a kindergarten, it is necessary that the one in charge of this department understand thoroughly its philosophy and system and has a practical knowledge of many apparently trivial things. It is absolutely essential that the kindergartner be trained for this line of work. That may be the reason why so few of the schools have this first stage in formal education in connection with the school.

School Feeding

Irregularity in meals, badly selected foods, and lack of careful mastication disturbs the activities of the most wonderful machine, the human body. The children are taught these facts. They are taught that foods should be carefully selected as to values and balance, that leafy green vegetables, fruits, milk, and cereals should play an important part in the daily diet. Yet many of them, either because of poor home management or because of poverty, go to school without any breakfast. Others, coming great distances to attend the Catholic school, must necessarily carry cold lunches which at times are indigestible. At the present time when so many heads of families are unemployed, it should be strange, indeed, if there were absolutely no children who have little or nothing on which to subsist. It is not surprising that teachers find it difficult to teach

children who are undernourished and below par. Does the parish or the community ever consider that a large percentage of money spent on education is wasted because so many children are physically unable to be benefited by it?

Having the welfare of these children at heart, we should have a full health program which makes provision for breakfast for poor children, and milk for all under-weight pupils.

One of the schools is doing all it can in this respect by providing one hot meal at noon to several poor children and sees to it that milk is daily distributed at their homes.

In pupil-resident schools and in the orphanges, three substantial meals are daily served to all pupils. In at least seventy-five percent of such institutions, the children are served also a light lunch immediately after school in the afternoon. Children are so hungry at that time! One of these schools located in a country region serves, without cost, to the day pupil, both dinner and lunch. The food needed is produced on the farm conducted by the school.

Thirty-three percent of the schools report serving lunches to those pupils requesting or making arrangements for this service.

A happy state of affairs exists in three percent of the schools - no underweight children. Unfortunately this con-

dition does not exist in all schools.

In six percent the children live near the school building. Consequently, they do not lunch in the school during the noon hour. These schools have no particular problem to solve respecting lunches. But thirty-seven percent of the schools make a provision for a supply of pure milk, cream, and butter for pupils who procure luncheon at the school. Twenty-four percent do not thus provide. Thirty-nine percent make no mention of such provision.

Pupils bringing noon lunches are provided, by eighteen percent of the schools, at cost, one hot dish, such as a bowl of soup or a cup of cocoa. A dish of hot soup is usually popular with the pupils. In one school, pupils who have good lunches secure the dish at cost. Those having poor lunches are served free. Thirty-seven percent of the schools give no service of this kind. Forty-five percent failed to answer the question.

Of all the schools serving milk to children during the school hours, there are three percent which feel the need of doing so twice a day, in the afternoon as well as in the morning.

Table IX gives the percentage of schools serving milk to underweight children during school hours.

TABLE IX. MILK SERVICE

	Percent serving	Percent not serving	Percent failing to state service or non-service
Milk in the mid-morning.....	37	16	47
Milk in the mid-afternoon.....	13	24	63

Were it not for the voluntary contributions of parishoners, the generosity of parents, the assistance given by organizations interested in the work of the school, the gifts of philanthropically inclined individuals, the donations of friends, and the charity of the schools themselves, the milk bill should be a heavy burden.

Table X gives the sources of funds for the milk distributed and the percentage of schools benefiting thereby.

TABLE X. MILK-FUND SOURCES

Those who pay for the milk distributed in the schools	Percentage of schools receiving this assistance
1. Parents.....	13.5
2. Parent-Teacher Association.....	5.0
3. Donations.....	2.5
4. Individuals and Rotana Club.....	8.0
5. Rotary Club.....	5.0
6. A Certain City Organization.....	2.5
7. Catholic Daughters.....	2.5
8. School Itself (Owns cows).....	16.0
9. School Itself (Own fund).....	2.5

Children who are given milk correlate positive health habits with knowledge of food value.

It is only with the greatest reluctance that a school drops the practice of milk distribution. When it has to do so it is only when the expense is too great and no support is given. Some districts are less privileged. In these, the schools find it difficult to attempt higher standards than environmental conditions permit, even in so simple a thing as milk distribution.

Balanced Periods

A program healthfully arranged is a part of the health education procedure. It provides for a proper sequence of study, recitation, play, and frequent rest periods, such that there is a proper proportion and dispersion to the school studies and activities at which teaching and learning may be at their best.

Eighty-two percent of the schools report having study, recitation, play, and rest periods carefully balanced. Six percent do not. Twelve percent make no statement as to what they do.

The writer doubts that those answering the questionnaire understood the health-service question thirty-eight to involve the time-sequence element. This question was recently submitted to six individuals. They were asked to give their interpretations. The responses were that the question asks if each of the activities above enumerated gets its proper proportion of time; that is, if each period is proportionate to the other. They did not find that the sequence element enters the question.

The question under discussion should have been broken up into several questions as follows.

1. Is provision made for alternations
   of intense and of easier tasks, of

mental and physical application, of study and recreation?

2. Do you have free and easy physical relaxation interrupt the work about once an hour for children in the lower grades and almost as frequently for those in the upper grades?
3. What is the length of time devoted to these short-period recesses?
4. What part of the day do you give to those subjects causing difficulty for the class or the teacher?
5. What part of the day do you give to those subjects requiring little concentration?
6. Are writing and drawing lessons given immediately after recess or the noon intermission?
7. Are the periods for pupils in the lower grades longer or shorter than periods given pupils in the upper grades?
8. Is the school day for first grade pupils shorter or the same length as the school day for upper-grade

pupils?

The school day and periods for the lower-grade pupils should be shorter than those for the upper-grade pupils. There should be a proper proportion of different subjects taught. The time of the day at which these may best be taught and the proper interspersion of these teaching periods with relief physical activities must also receive due consideration from educators.[1]

Home Work

Seventy-two and five-tenths percent of the schools require home work in the grades. Six-tenths percent state definitely that they do not have that requirement.

Table XI indicates the amount of time required for home study. A study of the table indicates that a reasonable amount of home work is, as a general rule allotted.

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1. Henry Eastman Bennett, School Efficiency, (Boston, 1917) p. 167 - 168.

TABLE XI. HOME-STUDY HOURS

Hours	Percentage of schools reporting in the affirmative	Percentage of schools reporting in the negative
More than one-half hour home work is required in the first four grades.....	4.1	95.9
More than one hour home work is required for the upper four grades.....	12.5	87.5
More than one and one-half hour home work is required in the high school grades.....	25	75

School Cleanliness

It is a matter of surprise to the writer to find that three percent of the schools should report lack of care in sweeping and cleaning the schoolrooms and to note that eighteen percent say nothing about it. On the other hand, it is gratifying to remark that seventy-nine percent go on record as practicing right methods in this regard.

In those schools having many after-school activities, the sweeping and cleaning of the school rooms may be

delayed, hindered, or interfered in the afternoon. Than it is either poorly done or delayed until the morning. If the latter is the case, the work is hurried. Invariably unnecessary dust is raised in all places where pupils and teachers meet.

In some schools a janitor is employed. It might be questioned whether the janitor is acquainted with approved methods of modern sanitation, heating, and ventilating, whether he be a man of tact and good manners. It might also be questioned whether he has had special training or specific preparation for his work. Inefficiency in janitor service may explain why some of the parochial schools have poor upkeep.

Schools having resident pupils and orphanages do not usually employ a janitor to take care of the interior of the building. The man in employ is generally an engineer who understands the furnace, heating, and ventilation, and attends to repairs, the walks, and the grounds. The sweeping, dusting, cleaning, and washing are done by the pupils, orphans and those working for their board. The work is allotted to them according to their age and strength. All work is done under the direction of the teacher in charge of the respective classroom to be cleaned, and under that of the resident pupils' prefect in the other places. One or two pupils are held responsible for one room or one hall

only. The work is then always well done and at the proper time.

Adequate Playgrounds

All the schools are provided with playgrounds. However, not all are adequate in size, location, and safety. Seventy-five percent of the playgrounds are large enough that all the pupils in attendance can use the playgrounds at the same time with perfect safety. At least ninety square feet of space is allowed each pupil. Three percent of the playgrounds are too small. The schools having these meet the problem by having the children use the playground in groups. There is no definite information relative to the remaining twenty-five percent.

Playground equipment is treated in the chapter dealing with physical and safety education.

The writer failed to have a question in the questionnaire investigating the nature of the surfacing of the playgrounds. This is important enough for considerating. The surface should be such that on windy days, the dust is not blown about. It should also be such that on wet days, the children do not carry soil into the rooms on their shoes.

School Inspections

In order that proper conditions may exist in buildings and on premises, to note where repairs are needed and what improvements are to be made, superiors or those appointed by them make periodic inspections. This examination is made yearly by those who have a position of higher authority than the local superior and the principal. In the case of parochial schools, the diocesan superintendent of schools makes the investigation. The local superiors also scrutinize the situation or the condition existing in their houses and in the schools entrusted to them. In some localities the inspection is made by the physician; in others, by the County Health Officer.

Table XII gives data pertaining to inspection for health purposes.

TABLE XIII. SCHOOL INSPECTIONS

	Percent of schools inspected	Percent of schools not inspected	Percent of schools omitting to signify inspection or non-inspection
Regular inspection.....	62	16	22
Inspection by physician.....	21	27	52
Inspection by County Health Officer...	3	0	97

As a general rule the buildings and premises of religious houses are in very good order as regards sanitation and cleanliness. It is the exception when the contrary is true. The buildings are frequently visited by the parents of the pupils and by the friends of both. These are frequently accompanied by others who express a desire to visit the buildings and their appurtenances.

CHAPTER III

HEALTH INSTRUCTION

One of the most universally used means of giving health instruction is the preparation, publication, and distribution of printed material setting forth clearly and simply the facts to be taught, learned, or put into practice. This material appears in many forms. In general, these may be classified as follows: books, bulletins, talks, or lectures, projects, and exhibitions. The present chapter presents the data gathered with respect to the use of these media.

For the remainder of this thesis, the writer omits two primary Indian schools. The reason for is that practically all material in the questionnaire is not applicable to them. The letters from the principals of both schools state that the schools are attended by a few small Indian children who hardly understand and speak English. All the pupils are day pupils. One of the principals writes, "It will take several years before we can advance the children far enough so that they will take any interest in much of the matter of your questionnaire". The other principal says, "All that can be done in this school for a few years is to teach these children the barest rudiments, the most elementary principles of

hygiene".

Course of Study for Hygiene Instruction

The course of study serves as a guidepost in aiding the teacher in problem-solving in any study. This is particularly true of a course of study in hygiene and safety instruction. Without following a systematized course of study, the teacher accomplishes little or nothing in teaching.

In the first place, the course of study keeps before the mind of the teacher the objectives to be realized. Before leaving the grade school, the children should master the most essential health habits. Through various activities, they should acquire a fundamental body of health knowledge to influence them daily during and after school life. They should have developed within themselves a health ideal and an appreciation of all that is wholesome and be able to make adjustments in their behavior in order to attain the optimem point of health for the sake of accomplishing more worthily the highest and noblest ends of life. However, a course of study need not be adhered to rigidly but should be applied to the needs of the community served by the school.

The specific questions in the questionnaire designed to secure information as to what is being done in order

that the above mentioned objectives might be realized are questions one to twenty-three inclusive. The questions in safety education are herein included. The children should be taught to guard against injury that their efficiency as future citizens may not be decreased. If they lose any members of their bodies or if their bodies do not function properly, these children will later fail to add to the wealth of the state and their efficiency in work will be lessened.

In the investigation we find that sixty-three percent of the schools use a definite course of study. Thirty-six percent of them do not use a course of study such as is used in the grades. This includes the high schools which draw upon reference material for work suggested in Biology and Social Science courses, and, in some phases, in Home Economic courses.

That a uniform course of study is not used may be seen from Table XIII, which gives the percentage frequency distribution by schools.

TABLE XIII. HYGIENE-INSTRUCTION COURSES OF STUDY

Course of Study	Percentage frequency of schools
Course of Study in Hygiene.....	2.8
Handbook of Health.....	11.8
Indian Course of Study.....	2.8
Montana State Course of Study for Elementary Schools.....	37.0
Physiology and Hygiene.....	2.8
Principles of Public Health.....	2.8
The Hygiene of the School Child.....	2.8

The author and publisher of each course of study and of each book used as a course of study is given in Appendix III.

Course of Study for Safety Education

Ten percent of the schools report using a definite course of study for safety education. Eight percent have no course of study in training children in habits of safety. Eighty-two percent make no report regarding such a course of study.

Table XIV gives the course of study used for safety education and the percentage frequency of schools using the same.

TABLE XIV. SAFETY-EDUCATION COURSES OF STUDY

Course of Study	Percentage frequency of schools
Course of Study for Safety Education in Oregon Schools.....	2.8
First Aid Charts.....	2.8
Montana Course of Study.....	2.8
Social Science Studies.....	2.8

The authors and publishers for the courses for safety education, as listed in Table XIV are given in Appendix IV.

Seventy-eight percent of the schools give the children training in safety and protection against accidents. Six percent do not give such training. Sixteen percent make no report.

A study of Table XIV indicates that outside the working of special projects assigned from time to time as a part of contest work, little is done in the line of safety education. This is the necessary inference since this phase of the work has little or no definite time allotment

for it in the school program.

Health Instruction in Schools

The percentage distribution of schools according to the grades in which health instruction is given are shown in Tables XV and XVI. The percentage numbers in these tables are based on the number of grade schools and on the number of high schools each taken separately.

TABLE XV. HEALTH INSTRUCTION IN PRIMARY GRADES

Grades	Percentage frequency of schools
First to Eighth Inclusive.....	95.5
First to Seventh Inclusive.....	.08
Fifth to Seventh Only.....	.04
Not reported.....	4.38

TABLE XVI. HEALTH INSTRUCTION IN SECONDARY SCHOOLS

Grades	Percentage frequency of schools
Twelfth.....	8.3
Ninth, Tenth, and Eleventh.....	8.3
Ninth and Tenth.....	16.6
Not in grades but correlated with studies.....	50.2
Not reported.....	16.6

Correlation with Subjects

Table XVII gives the distribution of the high schools giving health instruction not in any specif grade but in correlation with the subjects taught. It indicates the subjects correlated. The percentage frequency comprises the fifty and two-tenths percent of the high schools giving health instruction in connection with the different studies.

TABLE XVII. SUBJECT CORRELATION WITH HEALTH INSTRUCTION

Subjects	Percentage frequency of schools
Biology.....	50
General Science.....	25
Social Science.....	25

Place of Health Instruction

In the work of health instruction ninety-one and five-tenths percent of all the schools consider health and sanitation more important than physiology or anatomy. A course in practical health-teaching therefore takes the place of the old physiology in the former curriculum. The point sought is to teach something useful, something practical in a manner as interesting as this may be possible on an otherwise dry subject as that of hygiene.

Courses in Schools

Information regarding the specific courses offered by the different schools is presented in Table XVIII.

TABLE XVIII. SPECIFIC HEALTH COURSES IN SCHOOLS

Course	Percentage frequency of schools (All schools)
Community Health.....	83
First Aid.....	77
Germ Theory of Disease.....	85
Health Habits.....	85
Home Nursing and Care of Sick.....	34
Mental Hygiene.....	65
Nutrition.....	85
Personal Hygiene.....	91
Physical Hygiene.....	71

Texts in Intermediate Grades

, Ninety percent of the grade schools reported using a text. An additional five percent use two texts in the grades. The results of the investigation show variation in the text books for hygiene instruction. These are given in Table XIX.

TABLE XIX. INTERMEDIATE GRADE TEXTS FOR HYGIENE INSTRUCTION

Books	Percentage frequency of grade schools
Conn:	
Physiology and Hygiene.....	15
Hutchinson:	
The Child's Day.....	9
Handbook of Health.....	15
Newmayer and Broome:	
The Human Body and Its Care.....	18
The Way to Keep Well.....	24
O'Shea and Kellogg:	
The Body and Health.....	3
Ritchie:	
Primer of Sanitation.....	6
Turner and Pinckney:	
In Training for Health.....	6
Tuttle:	
Principles of Public Health.....	6

Health References in Intermediate Grades

The study of the regular text in the case of sixty-six percent of the grade schools is supplemented by the use of references. Fifteen percent of the schools have the complete set of references recommended by the State Course of Study. The books thus recommended are listed in Appendix V.[1]

TABLE XX. HEALTH REFERENCES FOR INTERMEDIATE GRADES

Health reference books	Percentage frequency of grade schools
American Medical Association:	
Hygeia.....	6
Andress:	
Boys and Girls of Wake-up Town.....	9
A Journey to Health Land.....	12
Health Education in Rural Schools..	3
Andress and Evans:	
Health and Good Citizenship.....	15
Beveridge and Whitcomb:	
Our Health Habits; Book I.....	6

1. Reference here is made to the 1924 Course of Study for Montana City Elementary Schools and also to the 1923 Course of Study for Rural Schools. The 1931 Course of Study was issued only last fall.

Broome and Newmayer:	
The Human Body and Its Care.....	3
The Way to Keep Well.....	3
Brown:	
Health in Home and Town.....	3
Burkland, Chamber, and Marony:	
Personal Health Habits.....	9
Conn:	
Elementary Physiology and Hygiene.....	12
Dore:	
Health and Happiness.....	6
Gregg:	
Hygiene as Nature Study.....	6
Grenfell:	
Yourself and Your Body.....	3
Gulick:	
Emergencies.....	3
Hoag:	
Organized Health Work in Schools.....	6
Hoag and Terman:	
Health Work in Schools.....	3
Hutchinson:	
The Child's Day.....	9
Jewett:	
Good Health.....	3
The Body at Work.....	3
Kellogg:	
Making the Most of Life.....	3
Kinne and Cooley:	
The Home and the Family.....	3
Munson:	
The Outline for Cleanliness Teaching.....	15

Neilson and Van Hagen:	
Physical Education for Elementary Schools	15
O'Shea and Kellogg:	
Health and Cleanliness	6
Health Habits	6
Making the Most of Life	6
The Body and Health	6
Ritchie:	
Primer of Hygiene and Sanitation	9
Terman:	
The Hygiene of the School Child	3
Turner:	
Health	3
Physiology and Health	18
Turner and Collins:	
Community Health	15
Turner and Pinckney:	
In Training for Health	21
Tuttle:	
Principles of Public Health	3
Williams and Dansdill:	
Health and Happiness	3
Health and Ideals	3
Health and the Rules of the Game	3
Health and Service	3
Wilson:	
Healthy Living	3
Woods and Hutchinson:	
Handbook of Health	15
... Bulletin No. 63:	
Care of Milk on the Farm	3
... Bulletin No. 602:	
Production of Clean Milk	3
... U. S. Department of Labor:	
Posture Exercises, Publication 165	15

Texts in High School Grades

Twenty-five percent of the high schools report using a text for health instruction. Six and five-tenths percent make no assertion. The remaining sixty-eight and five-tenths percent rely mainly upon reference books. The references used are obtainable either in the Public Library or in the high school library. Sixty-six and five-tenths of the high schools studied report references accessible to the students in the high school library.

Data respecting health texts used in the high schools are given in Table XXI; data respecting references, in Table XXII.

TABLE XXI. HYGIENE TEXTS IN HIGH SCHOOLS

Texts	Percentage frequency of high schools
Delano and McIssac: American Red Cross Textbook on the Elementary Hygiene and Home Care of the Sick.....	8.3
Hutchinson: Handbook of Health.....	25.0
Walters: Physiology and Hygiene for secondary schools.....	8.3

TABLE XXII. HEALTH REFERENCES IN HIGH SCHOOLS

References	Percentage frequency of high schools
Aldenger and Goldberger: First Aid Notes.....	8
American Meidical Association: Hygeia.....	8
Andress: Health Essentials.....	8
Blaisdell: Our Bodies.....	16
Chesser: Child Health and Character.....	8
Gruenberg: Biology and Human Life.....	16
Martin and Fitz: Human Body.....	8
Pieper and Beauchamps: Everyday Problems in Science.....	16
Ritchie: Human Physiology.....	8
Smallwood: Biology.....	25
Terman: Hygiene of the School Child.....	25
Towne: Sociology.....	25
Author Unknown: Home Nursing Book.....	8
Government Bulletins.....	41

Bulletins in Schools

Much published health material comes in the form of bulletins and pamphlets. These booklets have been written for special conditions. Each bulletin usually treats of a single topic. There are so many of them published by so many different organizations that they emphasize a wide range of health topics. They are one form of inexpensive health literature. Many of them may be obtained free of charge.

Forty percent of all the schools under investigation, definitely report the use of bulletins and pamphlets. Ten percent do not use them at all. The remaining fifty per- have nothing to say about them.

Table XXIII contains the answers to the question, "What series of bulletins or pamphlets do you find most helpful?"

TABLE XXIII. HELPFUL BULLETINS AND PAMPHLETS IN SCHOOLS

Bulletins and Pamphlets	Percentage frequency of schools
All bulletins and pamphlets available.....	3
Bulletins from the Cleanliness Institute, New York.....	3

Bulletins from the Metropolitan Life Insurance Company	12
Dr. Bryson's Bulletin on Hygiene	3
Health Charts by Dr. Wood	3
Public Health Laws and Regulations	6
Those issued by the Red Cross	3
Those obtainable from the National Tuberculosis Association, N. Y.	6
Those obtainable from the Dairy Council, Chicago	3
Those obtainable from the Brown Shoe Co., St. Louis, Mo.	3
Those obtainable from the Montana Board of Health	21
Those obtainable from the United States Public Health Service	9
Those published by the Child welfare and P.T.A. Societies	3
Those published by the Cereal Company	3
Those published by the American Child Health Association	3
Those regarding infectious diseases	3

Those regarding tuberculosis.....	3
Those regarding posture.....	6
Those regarding sanitation.....	6

There is a great variety of bulletins and pamphlets used in the different schools.

Study of Health Heroes

The study of health heroes is a laudable means of arousing the pupils' interest and of leading them to initiate further activities. Forty-five percent of the schools use this means. Fifteen percent do not give any instruction or require study of the lives of these heroes. Thirty-four percent do not indicate what they do in this respect. Sixteen percent volunteer the information that class instruction in this study is not given but that the biographies of health heroes are in the school library and that the students are encouraged to read them.

It is found that children enjoy and appreciate the study of health heroes. The pupils give evidence of this by engaging spontaneously in various worth-while activities. The responses of those answering the questionnaire indicate that this is the case. Their answers to the question ask-

ing them to list concisely such evidence they have observed, are herewith given in full in the following remarks.

REMARKS

At play they imitate Sisters on the battlefield, Red Cross nurses, visiting nurses, doctors, etc.

Anxious to become members of Junior Red Cross.

Biography of Lister has led many of the pupils to use more frequently the antiseptic known as Listerine.

Children's interest in the study of these biographies.

Constant reference and comparison with Theodore Roosevelt.

Hero worship.

Hiking.

Imitation.

Impression of such knowledge on minds of children.

Junior Red Cross.

Kindness to Animals.

Love of outdoor life.

Nature study.

Remembrance of fact taught.

They take a decided interest in the health crusade.

They have wished to read the lives of others who have added anything to the science of health.

They speak appreciatively of them and ask for them if they are not read.

They rank them above military leaders or others whose services are not so vital to humanity.

They make posters for exhibition using ideas gained from the study of health heroes.

Writing of essays self-appointed.

Health Talks to Pupils

A dominant factor in the teaching of hygiene is the lecture method. Some of the schools use it in trying to impress fundamental health ideas upon the children. Their frequency is given in Table XXIV.

TABLE XXIV. HEALTH TALKS TO PUPILS

Talks	Percentage of school frequency	Percentage not using this means	Percentage not stating
By physicians.	18	51	31
By nurses..... (This information was volunteered.)	6		
Talks on oral hygiene.....	66.5	12	21.5
Talks on care of eyes.....	66.5	15	18.5

The frequency with which physicians are called upon to give health talks is stated in Table XXV.

TABLE XXV. HEALTH TALKS

BY PHYSICIANS

Frequency of talks	Percentage frequency of schools
Occasionally.....	3
Six times per year.....	3
Twice a year.....	9
Once a year.....	3
Not often.....	3

This phase of work does not receive enough stress. Physicians could and should be called upon more frequently in more schools.

Table XXVI presents the phases of health work emphasized by physicians in their talks to students; Table XXVII, by nurses.

TABLE XXVI. EMPHASIZED PHASES OF HEALTH WORK (PHYSICIANS)

Phases of health work	Percentage frequency of schools
Amount and right kind of exercise	3
Avoidance of colds	3
Care of teeth	9
Cleanliness	6
Eyes	9
Food	3
Lungs	9
Posture	3
Prevention of diseases	3
Throat	3
Tuberculosis	3
Value of fresh air	3
Value of sunshine	3

TABLE XVII. EMPHASIZED PHASES OF HEALTH WORK (NURSES)

Phases of health work	Percentage frequency of schools
Care of eyes.....	3
Care of teeth.....	3
Prevention of spread of contagious diseases.....	3

Tables XXVI and XXVII illustrate the fact that in physicians' and nurses' talks to pupils, the care of the teeth and the care of the eyes receive the greatest amount of emphasis.

In most of the schools, the talks on oral hyguene are given by the teacher. Three percent of the schools have these talks given occasionally by the district nurse. Six percent of the schools having such talks fail to state the frequency.

Table XXVIII shows how often oral hygiene talks are given to pupils.

TABLE XXVIII. FREQUENCY OF ORAL HYGIENE TALKS

Frequency of talks	Percentage of school frequency
Daily	9
Weekly	24
Twice a week in the grades	9
When necessary in High School	6
Three times weekly	12
Bimonthly	3
No set time but we try to have a few each month	3
About every six weeks	3
Occasionally	3

Sixty-six percent of the schools have talks on the care of the eyes; six and five-tenths percent do not; and thirty-three percent do not have them. These talks are given either by the teachers or by the pupils, or both.

Table XXIX gives data with reference to the frequency with which talks on the care of the eyes, other than talks by nurses and physicians, are given. Twelve percent of the schools having these talks do not state the frequency.

TABLE XXIX. TALKS ON OCULAR CARE

Frequency of talks	Percentage of school frequency
Daily.....	3
Weekly.....	12
Bi-Monthly.....	3
Monthly.....	3
Very often.....	6
Sometimes oftener than bi-monthly.....	3
Twice a year.....	3
Once a year.....	3

Health Education Activities in Schools

Of the interest-arousing devices which can be used to advantage in giving hygiene and safety instruction, those which are used in the Montana Catholic Schools are listed in Table XXX. In the study it is noted that eighty-one and five-tenths of the schools utilize them.

TABLE XXX. PUPIL PARTICIPATION

IN HEALTH ACTIVITIES

Activities	Percentage frequency of those comprising the 81.5% using health activities	Percentage frequency of all schools
Average of all possible health activities for children	3.5	3
Gymnastic exercises	3.5	3
Health Club	14.5	8
Health contests	48	39
Health exhibit	55	45
Health games	63	51.5
Health plays	78	63
Indoor athletics for specific purpose of health education	11	3,3
Making health posters	88.5	72.5
Outdoor athletics for specific purpose of health education	11	3.3
Outdoor games for specific purpose of health education	3.5	3
Pupil keeping own individual health record	40	33
Swinging Indian clubs	3.5	3
Writing health stories	63	51.5

The making of health posters, the writing and the taking part in health plays, participation in health games, and the writing of health stories are the most popular forms in which facts and conditions of hygiene and safety are presented in interesting and instructive form.

One of the grade schools in one of the cities volunteered the information that their seventh grade was the first class in the State of Montana to get a health banner a few years ago.

Classes for Lisping Children

There are thirty lisping children attending the schools. Eleven children or twenty-nine per-cent of the number have classes. Forty-eight per-cent of the schools have no lispers in attendance.

The number distribution of lisping children is given in Table XXXI.

TABLE XXXI. DISTRIBUTION OF LISPING CHILDREN

Number of lisping children	School frequency	Do these have special class?
1.....	1	Yes
1.....	1	No
2.....	1	No
3.....	1	No
5.....	1	No
8.....	2	No
10.....	1	Yes

Classes for Stuttering Children

Twenty children who stutter attend thirteen or thirty-six percent of the schools considered. Forty-five percent of these children have special classes. There are no stuttering children in thirty-three and one-third percent of the schools. No report is given from the remaining thirty and seven-tenths percent of the schools concerning such children.

Table XXXII contains the frequency distribution of stuttering children in the schools.

TABLE XXXII. DISTRIBUTION OF STUTTERING CHILDREN

Number of stuttering children	School frequency	Do these have special classes?
1.....	5	No
1.....	1	Not stated
2.....	1	Yes
2.....	2	No
3.....	1	Yes
3.....	1	No
4.....	1	Yes
4.....	1	No

In studying Tables XXXI and XXXII, we find that the phase of work relative to lisping and stuttering children is somewhat neglected. The reason for this may be that this type of work requires specially trained people.

Pupil Interest in Hygiene

In seventy-five percent of the schools, the interest in health matters is very active. In three percent, the interest is nil. In the remaining twenty-two percent, the interest is not recorded.

It is noticed that children having little or no interest in health studies and practices live in non-progressive localities and have parents ignorant in matters hygienic.

The work in schools attended by such children is difficult for the teaching body. One of these schools freely offers the information that the teaching of hygiene and all related to it is "up-hill work". Another reports that only with resident pupils is it possible to arouse interest and that only in those cases in which the parents are educated, can much be done. This is found to be particularly true of Indian pupils.

The inference made from the consideration of these facts is that interest on the part of children in the study and practice of hygiene is dependent upon home environment and parental influence.

Pupil Progress in Hygiene

Pupil progress is also found to vary according to home conditions. Slow progress is characteristic of all those children having uneducated parents, parents indifferent to what is going on in the school, and parents who are, at times, hostile to anything in the school which means an additional effort on their part.

Table XXXIII has for object to set forth the facts respecting the question of pupil progress in hygiene studies and practices.

TABLE XXXIII. PUPIL PROGRESS

IN HYGIENIC MATTERS

	Percentage frequency of schools reporting Yes	Percentage frequency of schools reporting No	Percentage frequency of schools not reporting
Progress is satisfactory in the study of hygiene as a school subject.....	78.5	0	21.5
Pupils' progress in acquisition of health habits is rapid.....	63.5	0	15.5
Pupils' progress in acquisition of health habits is slow.....	21.0	0	15.5
Satisfactory progress is required as a condition for promotion.....	63.5	29	7.5

All the schools requiring satisfactory progress in the study of hygiene and in the acquisition of health habits find that the pupils' progress in these respects is rapid.

CHAPTER IV

HEALTH SUPERVISION OF THE SCHOOL CHILD

The extent to which the children derive protection from the hygiene of the school plant, the hygienic program, and the study requirements in Montana Catholic Schools is demonstrated in Chapter III. To exhibit what further protection is given in these schools from chronic and infectious diseases and what means are taken toward the corection of defects arising from acute infections and from teacher and parental informational deficiencies, as well as resulting from poor school, home, and community surroundings, is the province of this chapter on the health supervision of the school child.

Protective and Preventive Measures Against Communicable Diseases

From this study it is noted that sixty-nine and five-tenths of the schools have protective and preventive measures against communicable diseases. Three percent give a negative report. Twenty-seven and five-tenths percent make none.

Table XXXIV presents data respecting two contagious diseases, small-pox and diphtheria.

TABLE XXXIV. PROTECTIVE MEASURES AGAINST SMALL-POX AND DIPHTHERIA

	Percentage of schools reporting Yes	Percentage of schools reporting No	Percentage of schools not reporting
School population protected against small-pox by vaccination.....	62	0	18
School population protected against diphtheria by toxin anti-toxin.....	69.5	0	30.5

The writer has no figures available with reference to protection against scarlet fever.

At one of the orphanages the county doctor gives toxin and anti-toxin each year to all the children who have not had it or may need it. This prevents much illness.

It may not be amiss to state here that no system infallibly safeguarding the children against the hazard of contagion is absolutely practicable for schools having resident pupils. Entrance and later inoculations, and high standards of preventive and remedial follow-up of physical care go far to check the beginnings and spread of contagion. But none of these measures is infallible, even where the resident children have a minimum of outside contact. In any, even the very best, institution, contagious diseases and epidemics are bound to appear from time to time.

Consequently, practically all schools having resident pupils find it absolutely imperative to provide isolation facilities for at least minor contagious diseases. Some arrange to care even for major contagious cases. A principal of an Indian resident school writes, "Contagious children's diseases such as measles, the mumps, chicken pox, etc., are properly quarantined and attended to in our own infirmary". Two facilities for isolation purposes are described in Chapter II of this thesis.

Before proceeding further, it may be well to mention that school supervision is a combination of health activities designed to guard the health of the school children. These activities are carried on by physicians, nurses, dentists, clinics, teachers, principals, and superiors,

all helpfully cooperating with one another in this phase of health education.

Service of Physicians

The ideal, particularly in the larger institutions and in the orphanages, would be a full-time resident supervising physician. Limitations, however, of financial resources do not permit an individual Catholic school nor even the schools as a group to employ supervising physicians on full time. Nevertheless, the reports state that a number of schools have the advantage of a non-resident full time medical inspector or health officer. In two of the schools, the services of the services of the physician are given gratis. These schools have established such close relations with members of the local medical profession, that the results obtained under the volunteer service system are of a high order.

Table XXXV contains the findings relative to time and free service of medical inspectors and health officers.

TABLE XXXV. SERVICE OF MEDICAL INSPECTORS AND HEALTH OFFICERS

	Percentage of schools reporting Yes	Percentage of schools reporting No	Percentage of schools not reporting
Full time medical inspector.....	2.1	5.4	92.5
Part time medical inspector.....	2.1	0	97.9
Full time health officer.....	3.6	3	93.4
Free services of medical inspector.....	3.6	3	93.5

Those who pay for the services of the medical inspectors are listed in Table XXXVI.

TABLE XXXVI. DISBURSERS

FOR INSPECTOR'S SERVICES

	Percentage frequency of schools
City.....	3
County.....	12
Federal Government.....	18
Services Gratis.....	6
Not reported.....	9

The Catholic Indian schools have regular medical inspection. A letter from one of these schools makes the assertion, "The pupils are examined twice a year by the health officers of the United Indian Medical Service, and the field matron, a registered nurse, calls for the same purpose as often as the changing conditions of the enrollment may warrant her visits". Another quotation from the same letter is as follows: "The government physician vaccinates against small-pox whenever we receive new pupils who have not yet been vaccinated.

Service of Nurses

There is no difference of view among the Catholic school authorities as to the desirability of having a trained registered nurse in residence.

In the orphanages and in most of the resident schools, it has been and is still possible to secure the services of a resident sister registered nurse. In some of the day schools, particularly in the larger ones, the services of a lay woman, likewise a registered nurse, are also turned to practical account.

In all localities where it is impossible to obtain a full-time resident trained nurse, the next best choice is either to use the services of a full-time resident practical nurse, or to make use of available local visiting or student nurse facilities.

Information respecting nurses in the schools is supplied by Tables XXXVII and XXXVIII.

TABLE XXXVII. NURSES SERVICE IN THE SCHOOLS

	Percentage of schools reporting in the affirmative	Percentage of schools reporting in the negative	Percentage of schools not reporting
Health nurse....	42	3	55
School nurse....	45	36	19
Student nurses from the hospital.....	6	0	94

The information given in Table XXXVII regarding the student nurses is volunteered by those answering the questionnaire.

TABLE XXXVIII. DISBURSING AGENCIES FOR NURSE SERVICE

Agencies	Percentage of school frequency
Board of Education.....	12
Board of Health.....	5.5
County.....	9
Government.....	3
Indian Agencies.....	6
Private Agencies.....	12
School Board.....	3

It is gratifying to note that health service is obtainable through public health departments. The public health department is the natural body to carry out the work. Furthermore, it is only right and proper that the children attending the parochial and private schools should have the same service as the children attending the public schools. It is clearly recognized that health service is for the children and not for the school.

Service of Dental Hygienists

The dental hygienist is a strong factor in teaching children and parents the proper health habits in the care of the teeth, and also in putting the teeth in proper condition for reparative work by the dentist. This fact is not ignored in the Montana Catholic Schools. As many of the schools as can possibly do so avail themselves of the work of the dentist and the dental clinics. If this invaluable service is not used, it is because the financial resources are not sufficient to warrant the employment of the dentist.

In all the schools, with the exception of one of the orphanages, dental service is given in the dentist's office. However, most of the schools feel that the giving of dental service within the school itself is the more satisfactory plan. This plan insures more regular service. It saves time and the complications involved in taking the children to the dentist's office.

In one of the Montana cities in which a Catholic orphanage is located, the dentists offer their services free of charge once a year. They examine the teeth of every child in the institution. After completing all records respecting the children's teeth, they place a dental chair temporarily in the infirmary. They then give each child

all necessary attention. At other times of the year whenever necessary, these dentists require the children to be taken to their offices by the sister in charge.

The writer has no definite report with regard to dental service in the other orphanage. There is every reason to believe, however, that the dentists in that city are also generous in their services toward needy orphan children.

Service of Clinics

None of the schools have a tuberculosis clinic. Three percent, however, report that the pupils inclined to tuberculosis receive the close attention of the doctor.

The type of clinic serving the schools is set forth in Table XXXIX.

TABLE XXXIX. CLINIC SERVICE IN SCHOOLS

Type of clinic	Percentage of schools reporting clinic service	Percentage of schools reporting no clinic service	Percentage of schools failing to report
Central or general clinic.....	15	39	46
Dental clinic.....	24	39	37
For indigent poor.....	9	45	46
Psychological clinic.....	3	48	49
Pre-school clinic (Grade Schools).....	24	39	37

One of the schools not included in the percentage frequency of Table XXXIX reports that it has a clinic whenever necessary. Another school, also not included in the same table, mentions that the city in which that school is located, has a good clinic which cooperates well with the school.

There are ideal conditions existing in one locality since it is reported that a pre-school clinic is not nec-

essary there. What the conditions are that make it unnecessary to have such a clinic are not stated.

Service of Opticians

The oculists in one city give their services free of charge to the children of one of the orphan homes. Besides, the optical departments give reasonable rates. Moreover, some of the doctors also arrange that everything need is free of charge when the children are entirely dependent upon the orphanage.

Public Service for Safeguarding Children

Twenty-four percent of the schools are fortunate in having a full-time public service for the alleviation, succor, and counsel of children who require these because of being in destitution, or because of their experiencing adversity, or because of their misconduct or misdemeanors. This service also protects children from victimization, from the omission of others responsible for them to provide for them in the proper way, from wrong impositions, and from unworthy and vicious perils. Twenty-one percent of the schools are not so fortunate in these respects. Three percent enjoy a part-time service. Another three percent make the assertion that general supervision on the

part of the school authorities guards against all these. The remaining forty-nine percent do not communicate what condition exists in their localities respecting such service.

Health Examinations of Children

A reason compelling the yearly health examination is that the children have or acquire physical defects which must needs be discovered and to which remedial measures must be applied during the time of training for complete living; that is, during the early years of school life. Defects marring the life of the adult may frequently be corrected with little effort and difficulty if taken in time. The children, given the necessary aid, are enabled to attain normal physical development and to profit to the highest degree from the work offered by the school. Consequently, the program in health education requires that children be trained to have a complete medical examination every year. The only way to train them in this is to give them these yearly examinations.

The frequency with which health examinations are given to children attending the Montana Catholic Schools is depicted in Table XL.

TABLE XL. HEALTH EXAMINATIONS IN SCHOOLS

Frequency with which examinations take place in the schools	Percentage frequency of schools
Annually.....	33
Semi-annually.....	3
Zero.....	24
Not reported.....	40

Eight and three-tenths percent of the schools reporting as having the yearly health examination have the service of the County Nurse. Twenty-five percent report the service of the United Indian Medical Service. The remaining sixty-six and seven-tenths percent fail to state.

An important event in the lives of the young but important members of the family who look forward with interest and curiosity to the first day at school is the pre-school examination. This examination gives them a right start in the development of an all-round healthy personality.

The percentage frequency of the Catholic schools of Montana in which all children of pre-school age are examined is given in Table XLI.

TABLE XLI. PRE-SCHOOL EXAMINATIONS IN SCHOOLS

	Percentage frequency of schools
All children examined.....	24
Some children examined.....	4
None of the children examined.....	37
No report of the number of children examined.....	35

In the report no figures of the number of children undergoing pre-school examination are given.

Parents' Presence
At Health Examinations

The writer favors having the parents, at least one of them, present at the yearly examination. This examination is an efficacious means of parent education not to be despised. The topic of parent education is treated in Chapter VI of the present thesis. For the present it suffices to show whether the parents are present or not at the examinations that do take place.

Table XLII indicates the percentage frequency of schools having parents present at the health examinations of their children.

TABLE XLII. PARENTS' PRESENCE
AT HEALTH EXAMINATIONS

Responses	Percentage frequency of schools
Affirmative.....	3
Negative.....	34
Sometimes.....	6.4
Not reporting.....	37

The three percent school frequency in Table XLII has reference to the pre-school roundup only. Therefore, only twelve and five-tenths of the schools having health examinations have either one or both parents present at the time of the examination. Sixteen and five-tenths percent of the schools having yearly examinations have the parents sometimes present.

The investigation shows that parents do not attend the health examinations of their children. What is the reason? Is their lack of interest in the health examinations due, perhaps, to short, superficial examinations? Short, superficial examinations, of course, do not lay a proper foundation for corrective and remedial measures. Is the reason that the physician making the examination is not specially trained or experienced in children's work?

Individual Surveys of Children

Individual surveys of the children are made in forty-eight and five-tenths percent of the Catholic schools. Four and five-tenths do not make these surveys. Nothing definite is reported with reference to the remaining fifty-three percent of the schools in this part of the work.

Mental Tests in Schools

Sixty-three and five-tenths percent of the schools give mental tests. Nine and five-tenths percent omit giving these tests. Twenty-seven percent are silent on this point.

The percentage frequency with which the schools give mental tests are disclosed in Table XLIII. The number of the percentage frequency of schools is based on the number of schools administering these tests.

TABLE XLIII. MENTAL TESTING IN SCHOOLS

Frequency of testing	Percentage frequency of schools
More frequently than once a year.....	4.8
Once each year.....	62
Once every two years.....	23.8
Frequency not stated.....	9.4

Follow-up of Health Examinations

Systematic follow-up in the way of correction and cure is a normal and highly essential phase of the school health program. This systematic and thorough remedial, preventive, and constructive medical and physical care of the children is not apt to be given unless systematic and thorough records are kept of the children's needs and condition. Such records enable those interested in the jealth education of school children to plan intelligently in the light of all the facts. They also safeguard against forgetfulness.

In Tables XLIV and XLV are to be found facts in relation to the follow-up of all health examinations.

TABLE XLIV. FOLLOW-UP

OF HEALTH EXAMINATIONS

	Percentage of schools reporting in the affirmative	Percentage of schools reporting in the negative	Percentage of schools not reporting
The parent is directed to the family physician after all health examinations.....	51.5	8.2	40.3
All cases directed to the family physician are followed-up.....	45.5	5.5	49.0
A record is kept of the cases treated.....	36.0	6.6	57.4

The percentage number of schools in Table XLIV is based on the number of schools having health examinations.

Table XLV presents the percentage number of cases treated after the health examinations have taken place.

TABLE XLV. TREATMENT OF FOLLOW-UP CASES

Percentage of schools reporting	Percentage of cases treated after the health examinations
5.5	25
11	50
5.5	75
11	80
11	90
27.5	100

In forty percent of the schools reporting the hundred percent case treatment after the health examinations, the remedial work is done by the supervisors. In the remaining sixty percent giving the same favorable report, the work is done by the physicians. All the children receive treatment.

Health Inspection of Children

Before taking up the topic of records and record keeping, it may be well to insert statistics relative to the morning inspection in the schools.

Sixty percent of the schools have such an inspection to check health habits. Six percent do not avail themselves of this little health educational means. Twenty-eight percent fail to state what they are doing in this particular respect.

Weighing and Measuring Children

Each child is weighed and measured periodically in fifty-seven and five-tenths percent of the schools under investigation. In two and seven-tenths percent, the children are not given the incentive that comes from this practice. In thirty-nine and eight-tenths percent of the schools, this interest-raising device is not definitely known to be used.

The frequency with which the weighing and measuring of the school children occurs is given in Table XLVI. The figure giving the percentage frequency in schools is based on the number of schools weighing and measuring each child in the school.

TABLE XLVI. WEIGHING AND MEASURING OF CHILDREN

Frequency	Percentage frequency of schools
Monthly.....	15.7
Quarterly.....	15.7
Annually.....	31.6
Semi-annually.....	31.6
Tri-annually.....	5.4

In response to the question, "Do the children study weights and compare them?", sixty percent of the school officers give an affirmative answer; and six percent, a negative answer. Three percent affirm that all children are not interested. The remaining thirty-one percent decline to express themselves on this point.

Health Records of Children

Information pertaining to records and record keeping in the schools is disclosed in Table XLVII.

TABLE XLVII. KEEPING OF RECORDS

Records	Percentage frequency of schools reporting in the affirmative	Percentage frequency of schools reporting in the negative	Percentage frequency of schools not reporting
Of child's			
a. health history....	9	18	73
b. general health.....	45	21	34
c. growth.....	24	27	49
d. weight.....	24	24	52
Of defects:			
a. vision.....	57	21	22
b. hearing.....	51	21	28
c. posture.....	33	24	43
d. breathing....	39	24	37
Of mental tests...	27	9	64

Twenty-seven percent of the schools keep definite record of the monthly weighings and measurings.

With reference to a health folder for each child, it is reported that thirty-three percent of the schools have them. Six and five-tenths percent do not have them. The remaining sixty and five-tenths percent do not state whether they have or do not have them.

Six percent of the schools make the statement that the health records are kept by the school nurses. Three percent state that permanent records of Physicians' and nurses' visits and inspections are kept in the school and also in the Indian Reservation Office.

Health records are kept in forty-five percent of the schools. Five and five-tenths percent do not ask credit for keeping such records. Forty-nine and five-tenths percent say nothing about them.

Table XLVIII discloses the frequency with which health records are taken in the schools in which they are kept. The percentage frequency figures are based on the number of schools having and keeping health records.

TABLE XLVIII. FREQUENCY OF HEALTH RECORDING

Frequency	Percentage frequency of schools
Monthly.....	2.0
Quarterly.....	6.6
Semi-annually.....	2.5
Annually.....	4.6

The records indicate improvement in the health habits of the children in seventy-three percent of the schools. The same observation is not reported in fifteen percent. In these schools, improvement does not always take place. The remaining twelve percent make no statement in this regard either one way or the other.

Results of General Supervision

Seventy-one percent of the school officials find that on account of general health supervision children do strive for correction of defects. It seems strange that any should report the contrary. Nevertheless, negative reports come from four and five-tenths percent of the schools. Whether the children do or do not strive for improvement in the remaining twenty-four and five-tenths percent of the schools is not asserted.

Is the reason for the results of general health supervision not being entirely satisfactory that much of the health work is unorganized? The activities are themselves definite problems. Moreover, in the Catholic school, the financing of health supervision activities is a very great problem.

Only when health inspection and health supervision includes the parochial and private schools as well as the public schools and is conducted at public expense is the system of health inspection and supervision efficient. It is thus conducted in the parochial schools of the Archdiocese of San Francisco with eminently satisfactory results.

Before proceeding to the next chapter, the writer desires to say something respecting the work done of a cor-

rective nature and along lines of health supervision at the orthopedic hospital school at Billings.

Facilities for Crippled Children

The Saint Vincent Hospital-School located at Billings, Montana, is a private institution of an undenominational character conducted under Catholic auspices solely for the welfare of the children handicapped by physical deformities. The chief and principal aims of this institution are the rehabilitation and improvement in the health conditions of the children admitted.

This institution welcomes all cases without regard to color, race, denomination, or financial conditions. Its only requirement is that the children be mentally and physically capable of being benefited.

Because many children are unable, on account of their physical condition, to attend the ordinary schools, and because many others require special treatment to fit them for their life's work, the institution maintains a fully accredited educational department. The children receive an education commensurate with their physical strength and inclinations. At the same time, they receive instruction in the ordinary hygiene as prescribed by the State course of study. They are given also training in health habits. Their weak limbs are made to walk and run. Children con-

sidered as hopelessly crippled are put on their feet. When surgery is of little or no avail, they are carefully treated and relieved of pain. In addition to this, they are given, each one, complete treatment in physiotherapy according to their individual needs.

As all the children attending the hospital-school are residents of the schools, the individuals supervising and in charge see to it that the poor, thin, half-starved little bodies are built up on a variety of wholesome diet. Good food frequently accomplishes more than surgery for many of these unfortunates.

This work of health supervision is performed by a staff of specialists consisting of nurses, physiotherapists, and teachers under the direction of an educational supervisor and devoted orthopedic surgeon.

In 1922 the Governor of the State of Montana appointed an Orthopedic Commission after the State Legislature appropriated $25,000 to help the work of correcting orthopedic crippling defects throughout the State, to see that the funds are properly used in obtaining care for children whose parents cannot afford to finance their cases. Every legislative session, since the Montana Federation of Women's clubs first made its appeal for legislative aid, has renewed the appropriation. Nevertheless, the funds are inadequate to handle the situation. Therefore, auxiliaries have

been formed to take care of the problem in communities. In Billings, the Community Chest recognizes the merit of the orthopedic work of the institution and lays aside a proportion of its funds to help maintain the school.

An excerpt from the report, "The Educational Facilities for Crippled Children in Montana", which was submitted by Miss Meek to the White House Conference on Child Health and Protection, is given in Appendix VIII of this thesis.

CHAPTER V

PHYSICAL EDUCATION

Physical education, primarily hygienic, is a vital part of the education of school children. It builds them up in physique through suitable physical activities based on the needs of the pupils. It also gives them one of the approaches to the acquisition of good health; namely, exercises, but not exercise in the adult term of the word.

Physical education activities are carried out in classrooms, in school corridors, on playgrounds, in gymnasiums, in swimming pools, and in athletic fields. The content is extensive. Such activities as singing games, story plays, rhythmic exercises, folk dancing, and athletics are included. Formal gymnastics has its place too, but a subordinate one.

The periods to physical education are more for relaxation and recreation than for the gaining of athletic skill. Consequently, all the children can compete. The work done during these periods looks towards building up the children physically, towards the formation of right habits and the corection and prevention of wrong habits, and towards the liberal utilization of physical play.

Department of Physical Education

Of the Montana Catholic Schools, thirty-three and one-third percent have a department of physical education to supervise and to take care of all work designed towards the physical upbuilding of the individual. Forty-five percent do not have a physical education department as such. Twenty-one and one-third percent of the schools do not respond to the question.

Places for Physical Education Activities

The places provided in which or where physical education activities can take place are listed in Table XLVIX.

TABLE XLVIX. PLACES FOR PHYSICAL EDUCATION ACTIVITIES

Places	Percentage frequency of schools providing	Percentage frequency of schools not providing	Percentage frequency of schools not reporting
Gymnasium.....	45	39	16
Playground.....	78.5	3	18.5
Swimming pool.....	6	57	27
Tennis court.....	15	80	5

Eighty percent of the schools having both gymnasium and assembly room or auditorium, report a separate gymnasium. Three and three-tenths percent state that one room is used for both purposes. Sixteen and seven-tenths percent make no statement.

Eighty-five percent of the grade schools report that they have a shelter room. This room can be used for play space by the primary pupils during times of inclement weather. Ten percent of the grade schools have no place that can be used for the same purpose. Five percent do not report.

One school enjoys the use of the State College gymnasium and swimming pool for all its students, boys and girls. A second school uses the Knights of Columbus' gymnasium. A third school is permitted to send the pupils once a week to one of the public schools for swimming.

Instruction in Special Physical Activities

Fifteen percent of the schools give their pupils the advantage of swimming instruction. Fifty-four and five-tenths percent do not. Thirty and five-tenths percent make no affirmation on this point. In one of the schools, the instruction in swimming is directed by the State College. In a second school, this type of instruction is given by the Knights of Columbus and by the Young Men's Christian Association. In a third school, the lessons are given by the last named organization.

In twelve percent of the schools, the children are being benefited by military drill instruction. In forty-eight and five-tenths percent, the pupils are not given this particular activity. It is not definitely known to the writer that the children in the remaining thirty-nine and five-tenths percent of the schools receive this training.

A program of corrective exercises exists in forty-two percent of the Montana Catholic Schools. Fifteen percent fail to provide them. Forty-three percent furnish no information respecting such exercises.

Use of Gymnasium Period

The gymnasium period is used in three percent of the schools in group competitions between pupils of like ability in mass teams, team contests, track and field events, calisthenics, marching, folk dancing, and songs. It is not thus utilized in fifteen per-cent of the schools. Nothing definite is known how the period is used in the remaining eighty-two per cent.

The writer regrets not having had definite and specific questions in the questionnaire asking what the exercises or activities are in which pupils are engaged during the gymnasium period. The writer also feels that questions inquiring if large group compe-titions in athletics are emphasized by the school or if these competitions are made only an incidental part of the program should also have been included. Some schools, no doubt, make use of one activity in pre-ference to another and stress a certain one more than another.

Time for Gymnasium Period

The hours and periods of the day used for the gymnasium period are given in Table L.

TABLE L. TIME FOR GYMNASIUM PERIOD

Periods	Percentage frequency of schools
3 - 4 - 12 - 6 - 8 periods.....	3
Evenings.....	3
After school.....	15
Recess periods; 10:30 A.M.; 2:30 P.M.; and 4:30 P.M.	3
1:45 and 2:30 P.M.	3
1 - 4 for the grades; 5 - 8 for the high school.....	3
From 10:30 A.M. to 12:00 N.; and from 1:00 to 4:00 P.M.	3
Recess periods in the morning and in the afternoon.....	3
Between 10:00 and 11:20 A.M.	3
Between 1:00 and 2:00 P.M.	3
Between 2:00 and 3:00 P.M.	3
Different hours for different grades.....	3
None of the periods.....	3

One of the schools reports using the gymnasium three hours three times a week but fails to state what the hours are.

Evidence for the amount of time devoted to gymnasium activities is obtained in Table LI.

TABLE LI. AVERAGE GYMNASIUM TIME PER WEEK

Amount of time	Percentage frequency of schools
20 minutes.....	3
40 minutes.....	3
60 minutes.....	6
80 minutes.....	3
90 minutes.....	6
120 minutes.....	9
180 minutes.....	12
From 7 to 10 hours.....	3
None.....	3
Not reported.....	49

A study of Tables L and LI shows that there is no uniformity in the matter of the time when the gymnasium is used nor in the amount of time there consumed.

Recess in Schools

When frequent recesses are given, play and healthful activities of the type that have an appeal to the children minimize the effects of classroom confinement.

Tables LII and LIII indicate that many of the schools appreciate the recess as a means towards physical development. A few, however, do not utilize these periods of intermissions. Some neglect to have them. Others having them to fail to place emphasis upon active play.

TABLE LII. RECESS PERIODS IN SCHOOLS

Recess	Percentage frequency of schools reporting in the affirmative	Percentage frequency of schools reporting in the negative	Percentage frequency of schools not reporting
Morning.....	87.5	6	16.5
Afternoon.....	81.5	6	12.5

TABLE LIII. LENGTH OF RECESS PERIODS

Length of time	Percentage frequency of schools
10 minutes.....	3.0
10 minutes for upper grades (20 minutes for lower grades).....	3.0
15 minutes.....	75.5
20 minutes.....	6.0
Not reported.....	12.5

Six percent of the schools report that a noon intermission of sixty minutes serves as a recess period. Three percent have afternoon recess only for the younger children. A second three percent have recess for the grades only in the morning; and in the afternoon, only for the first four grades. A third three percent have recess in the afternoon only for the first grade.

All children have the instinct to play, but all do not know how to play. Hence, it is necessary to teach them. Supervised and directed play has, consequently an important place in the school, particu-

larly in the grade school.

Table LIV gives in formation respecting the conduct of the recess period, which is usually the play period. A study of this table evinces that most of the schools direct the play and recess activities of the children.

TABLE LIV. SURVEILLANCE OF RECESS ACTIVITIES

Recess activities	Percentage frequency of schools
Directed.....	88
Non-directed.....	12

Of the schools included in Table LIV as having non-directed recess activities, twenty-five percent have the activities directed in the lower grades and not in the upper grades. The high schools do not control the play activities of the pupils so closely.

Playground Equipment of Schools

Recess and play periods necessitate ample playground space. Information relative to the size of the Catholic school playgrounds is given in Chapter II of this thesis.

There is no question in the questionnaire inquiring as to the amount and the nature of the playground equipment. However, some information respecting such apparatus is volunteered by the officers answering.

One school has the following equipment: three teeter-totters for boys, three teeter-totters for girls, three swings for boys, three swings for girls, one giant strider for boys, and one basket-ball court for both boys and girls.

A second school has one chute-the-chutes, two sliding bars, one hanging ladder, two chinning bars, fifteen swings, and five teeter-totters. This school has also an athletic field in addition to the regular playground.

A third school has an ocean-wave merry-go-round and a giant strider.

A note added by one of the principals to the questionnaire says, "The pupils are fond of athletics and compete with other schools in basket-ball, football, racing, the high jump, etc."

The boys' high schools compete with other schools in the state in athletic feats during the track meet held each

year at the University of Montana located at Missoula.

Although the girls' schools do not enter into inter-school games, there are always inter-class games. These give ample scope for enthusiasm and stimulus.

Table LV gives the courses of study used in physical education in the schools. No one course is exclusively used.

TABLE LV. PHYSICAL EDUCATION

COURSES OF STUDY

Course of Study	Percentage frequency of schools
Course of Study prescribed by the Eastern State Normal School, Billings, Montana	3
Tumbling, Scepter Swinging, Dancing	3
Community Course	6
Physical Education for Elementary Schools	3
Montana State Course	3
No definite course used	12

The authors and publishers of the physical education courses of study mentioned in Table LV are given in Appendix VII of the present thesis.

Having presented what is being done in the Montana Catholic Schools along protective and preventive lines in health education, the writer proceeds in the next chapter to the presentation of facts relative to parent and community cooperation.

CHAPTER VI

SECURING CO-OPERATION

Even though schools may be most efficient and may attain to the ideal in health education, they need the co-operation of the home. Every home must do its part with unswerving fidelity, and a right knowledge and understanding of hygienic laws and practices. Some of the homes should be assisted, if need be, by local and community organizations. The various organizations can render them financial or other required aid.

Parent Co-operation

Health is primarily a matter of the home. None other than the parents are utterly and finally responsible for the health of their children. At the very best the children are in school a few short hours only each day and then only five out of the seven days of the week. Therefore, if the schools and particularly the day schools would succeed in their program of health education and in their efforts to further this education, they must secure the co-operation of the parents.

That fifty-one and five-tenths percent of the Montana

Catholic Schools have the whole-hearted co-operation of the parents is evidenced by the present study. Only four and four-tenths percent of the schools grant that they do not have any co-operation whatever. Forty-four and three-tenths percent do not pronounce themselves as to the co-operation or non-co-operation of the parents.

It is noted that little or no co-operation is given by Indian parents except by those who have at one time been resident pupils. They are usually not interested in the work of the school unless they are former resident pupils. Some of the white parents also, particularly uneducated foreigners, give little or no co-operation.

The ways in which parents co-operate are listed in Table LVI.

The percentage frequency number in Table LVI is based on the number of schools enjoying the help and assistance of the parents in health matters.

TABLE LVI. MANNER OF PARENT CO-OPERATION

Ways	Percentage frequency of schools
Attendance at health programs.....	5.9
Attendance at lectures given by the school nurse.....	5.9
By attending to the advice of the county nurse.....	17.6
By giving careful home training.....	5.9
By providing proper clothing for the children.....	11.8
By showing interest.....	5.9
By visiting health exhibits.....	5.9
Care of the teeth.....	11.8
Checking children's home habits.....	35.0
Consulting health nurse when necessary.....	17.6
Contributing money toward the purchase of health reference books.....	5.9
Correcting defective eyesight.....	17.6
Having children participate in outdoor games.....	17.6
Having the doctors examine the children at regular intervals.....	17.6

Having physicians talk at meetings of a certain organization.....	17.6
In the personal cleanliness of children.....	29.4
Providing milk for undernourished children.....	41.0
Providing proper food.....	41.0
Providing recreation.....	23.3
Providing rest.....	23.3
Removal of tonsils.....	17.6
The organization of Parent's Club.....	17.6

The ways in which parents may and do co-operate in health education are many and varied.

Community Co-operation

School officials may know of the children's need for glasses or of the necessity of surgical operations for adenoid removal. They may recommend that these defects be remedied. But the parents have the final word in deciding whether or not the needed corrective work shall be done.

If the parents' co-operation is obtained, the corrective work is usually done by the family physician and paid for by the parents. But if the parents are poor,

they must be assisted. The children must then be provided for by the clinics of the Health Department, or by the semi-public organizations. Consequently, it is necessary that the schools secure the co-operation also of the local agencies and community organizations.

Seventy-five percent of the schools have the co-operation of local and community organizations. Two and two-tenths percent deny receiving this concurrence. The remaining twenty-two and eight-tenths percent do not report on this question.

The organizations co-operating with the schools are varied in character. Some are private; some, semi-public; and some, public.

Table LVII catalogues the organizations co-operating with the Montana Catholic Schools.

The school frequency number in Table LVII is based on the number of schools giving favorable reports respecting co-operation on the part of local and community organizations.

TABLE LVII. COAD-JUTORS OF SCHOOLS

Agencies and Organizations	Percentage frequency of schools
Athletic Organization.....	4
Barbers' Union.....	4
Board of Health.....	4
Catholic Daughters.....	12
Children's Clinic.....	8
Clinics.....	8
City Health Department.....	12
County Health Department.....	16
Dental Clinic.....	8
Dental Clinic sponsored by Kiwanis.....	4
First Aid.....	4
Good Health Plays.....	4
Government Doctor.....	12
Knights of Columbus.....	8
Local Dentists.....	4
Local Dispensaries and Hospitals.....	76
Local Physicians.....	12
Montana Health Association.....	4
National Tuberculosis Association.....	4
Oculists and Opticians.....	4

Parent-Teacher Association.....	36
Public Health Department.....	24
Public Nurse.....	8
Red Cross.....	20
Rotana Club.....	4
Rotary Club.....	4
School Board.....	4
St. Ann's Sodality.....	8
Swimming Organization.....	4
Training Schools for Nurses.....	8
United Indian Medical Service.....	12
Women's Club.....	4
Young Men's Christian Association.....	8

Parent Education

To secure the co-operation of the parents means, in most cases, that the school must educate the parents for their part of the task. Even in the better homes, there is a lack of understanding of child life and child training. Many of the parents are not informed respecting the scientific prevention of disease. No small number are still unconvinced of the value of vaccination or else they are ignorant of the germ theory of disease. Some still adhere to customs based on personal idiosyncrasies, tradi-

tions, and superstitions coming down from a time before the present-day development of the sciences of bacteriology, hygiene, and nutrition giving us the newer knowledge of personal health and disease prevention. The foods, methods of ventilation, amounts of exercise and habits of personal hygiene which were in good standing a generation ago do not necessarily conform with the demands of present city life with its artificial foods, crowded quarters, needless waste of nervous energy, and lack of physical exertion of any kind. Much of the current health information acquired by the adult population comes by way of the daily paper with its advertisements. Not a little of the adult knowledge of hygiene and disease prevention is what is termed "popular" as opposed to that which is accurate and scientific. Consequently, it becomes necessary for the school to function as an agency for the dissemination of scientific knowledge.

There are several channels by means of which the school may be instrumental in educating the parents; namely, health addresses to parent meetings, health talks by physicians and nurses to parents, the presence of parents at the health examinations of their children, and the use of the newspapers.

Table LVIII shows to what extent these means are used by the Montana Catholic Schools in parent education. The

orphanages are not included in the number of schools. Nineteen percent of the remaining schools have no Parent-Teacher Association.

TABLE LVIII. MEANS FOR PARENT EDUCATION

Means	Percentage frequency of schools reporting in the affirmative	Percentage frequency of schools reporting in the negative	Percentage frequency of schools not reporting
Addresses are made to parents on child hygiene.....	32.2	22.4	45.4
Nurses are asked to give talks to parents.....	6.4	0	93.6
Physicians are asked to give talks to parents....	6.4	0	93.6
The Parent-Teacher Association studies the physical care of children....	32.2	22.4	26.4
The school circulates cards of instruction to parents.....	22.4	51.5	16.1
The school uses the newspaper as a medium of health instruction.....	25.8	51.5	22.7

For information respecting the presence of parents at the health examination of their children see Chapter V, page 92, Table XLII.

Three and two-tenths percent of the schools state that the Parent-Teacher Associations of the schools are very interested in the health study.

It is remarkable that the schools using one or more of the means cited in Table LVIII are the schools which get the parents to co-operate in the health work of the school.

CHAPTER VII

SUMMARY AND RECOMMENDATIONS

The response made to the questionnaire sent to the various Catholic grade and high schools in Montana during the year 1931 was such that this thesis gives a report of ninety percent of the schools.

The questionnaire makes inquiry into the work done in health instruction, safety education, physical education, and health service. This comprises the preventive, corrective, and protective duty of the school. The part of the parent and of the community is not overlooked.

The deductions made in this chapter are based upon the data revealed by the answers in the questionnaire.

The purpose of this thesis is to discover what the Catholic Schools of Montana are doing in health education and to what extent they do the work.

The first chapter defines health education as being all which has a favorable influence upon the individual such that the result is a happy, healthy, efficient individual, - one always at his best. A brief explanation of each phase of health education is offered. The phases explained are the hygiene of the school, health instruc-

tion, physical and safety education, and the part of the parent.

Chapter II deals with school hygiene. The various school plants have, in the main, facilities for the health protection of the child so far as the buildings and equipment are concerned. Practically all the schools have classrooms in which the hygienic conditions are good. There are no open air rooms, in the strict sense of the word. However, the rooms are well ventilated. In some cases, the windows are open during all kinds of weather. The conditions respecting adjustable seats and desks are fairly good. All classrooms without adjustable seating facilities should by all means be improved. The greater number of schools are supplied with sanitary drinking fountains. A few have individual cups. Sanitary toilet facilities are provided. Not all schools provide paper towels. This situation can easily be remedied by requiring pupils to bring their own towels or by having the parents contribute a little for this purpose. The health equipment, while relatively good, is in some cases, not as complete as it might be. There should be scales in every school. Scales give the first indication that malnutrition exists. In the primary schools, there should be a health chart on every wall. In the resident schools, the infirmaries, medicine chests, and isolation facilities are good. It is gratifying to note

that one-third of the schools have a kindergarten and nursery. The meals and lunches at many day schools and in practically all the resident schools receive due and proper attention. Underweight children are taken care of in many of the schools. In times of depression this is most important. The parent-teacher associations might do more in aiding to pay for the milk supply. A reasonable amount of home work is generally required. The playgrounds are in each case protective. A few of the playgrounds are small. The difficulty is met for the present, by permitting only a few classes on the playground at a time. Clean school buildings and premises are usually the case.

In the study of health instruction in the schools in Chapter III, we find that the grade school children are given instruction in hygiene and safety. This work is carried into the high school and is there correlated with several of the subjects. There is a differentiation of courses of study used. The greatest insistence is placed upon personal hygiene. Home nursing and care of the sick receive least attention. The health references and bulletins used are many. The latter are utilized to a great extent. Health heroes are studied. Health talks are given by physicians and nurses to pupils but not so frequently as they might be. The physicians should be called upon to give health talks more frequently. The schools make

use of the interest-arousing health activities. A work that receives little attention is that relative to lisping and stuttering children. These children require much time and a specially trained teacher. With few exceptions, pupils are interested in health work and make progress in health habits. Three-fifths of the schools require satisfactory progress in health habits for promotion.

Chapter IV gives data respecting the health supervision of the child. There is some supervision work being done. Organized medical supervision, however, is absent. The schools sharing in public funds for health purposes and the orphanages have the better health supervision. The hospital school is an outstanding institution for the rehabilitation of children suffering from crippling orthopedic defects. Some of the physicians give part of their time and service gratis. These physicians should be commended. Some of the schools, in several places, receive supervision service from the public health department. Any system of medical school supervision is greatly handicapped by not having control of the children attending the Catholic schools. These children are in almost constant contact with the public school children outside of school hours. In many cases they come from the same homes. The percentage of schools reporting clinics is not so high as desired. There should be a clinic in each locality. The

yearly health examination requires the co-operation of the physician. The percentage of physician co-operation is fairly good. In most cases, corrective work follows the health examination. The percentage of such corrective work is very good in all schools having the health examination. The children's interest is, in most schools, stimulated by the weighings and measurings, which take place at least once a year. Approximately half the schools keep health records. This is good considering that the teachers have so many other things to do. There are few teachers who have a special training in child-health matters. There should be, in each school, at least one teacher-nurse; that is, a teacher specially trained in child-health work, whose duty it should be to take care of all these things.

In Chapter V we find that the schools and particularly the grade schools, have directed activities during the recess periods. The gymnasium period in most instances is used for up-building purposes. No uniform hour is set aside for the gymnasium period. A number of schools have this period after school. The time spent in the gymnasium also varies. Several schools use no definite course of study.

Chapter VI gives the information that the parents who spend some time in the study of child health and those

parents who are former pupils of the school in the case of the Indian, are the ones who give the greater amount of co-operation in health matters. These parents assist the school in many helpful ways.

The majority of the schools having parent co-operation have also the co-operation of local agencies and community organizations. If it were not for the financial assistance and support given by the different organizations, many of the schools should find it difficult, nay impossible to further the work. To obtain the needed assistance, the schools use various educative means.

The investigation shows that, as a whole, the health education situation in the Montana Catholic Schools, is for the time being, satisfactory. Though the work is not so well organized, a reasonable amount is being done.

Having in mind the improvement of the preventive, corrective, and protective functioning of the Montana Catholic Schools in health education, the one who writes this thesis makes the following recommendations.

1. The writer recommends that other investigations be made

1. to evaluate

a. the courses of study, the text books, and the reference materials used in the schools;

b. first aid and home nursing courses in

both the primary and the secondary schools;

and

2. to determine

a. the number of absences in the schools due to illness or accident;

b. the extent of the health knowledge of the children attending these schools;

c. the health habits of these children;

d. the methods in which health material may best presented in connection with the regular school subjects;

d. the content and method of health education activities from the pupils' viewpoint; and

f. the effectiveness of health education work.

2. The writer recommends that organized medical inspection be introduced into the schools.

The reason why this inspection is absent in many of the schools at the present time is that there is a lack of financial resources. The funds in most instances do not permit giving every child a medical examination every year. But at least three medical examinations could be given every child. Young physicians should be glad to render this service. They should not ordinarily look for compensation. Any trouble the procedure entails will be

amply repaid them by the valuable experience gained.

3. The writer recommends that there be established in the Parent-Teacher Association of each locality, a special department to care for the hygienic conditions of the school and the health of the school child. It is true that the National Congress of Parents and Teachers has a department of health. But not all local parent-teacher organizations have a special health department.

4. The writer recommends that there be established a well-organized school health department supported by public funds to take care of all school children irrespective of the school attended. It is evident that an injustice is committed in providing for the health of one group without caring for the other group.

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APPENDIX I

QUESTIONNAIRE

A STUDY IN HEALTH EDUCATION IN CATHOLIC SCHOOLS

NAME OF SCHOOL_____

CITY_____

STATE_____

Kindly insert answers in the blank spaces.

I. HEALTH INSTRUCTION

1. Does the school give a regular course of instruction in hygiene?_____
2. Instruction in hygiene is given in these grades (check correct ones); 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th.
3. Does the school teach personal hygiene?_____ Physical hygiene?_____ Mental hygiene?_____ Health habits?_____ Community health?_____ Does your school teach health and sanitation as more important than Physiology or Anatomy?_____
4. Does your school give instruction in foods?_____ In the germ theory of disease?_____ Instruction in first aid?_____ In home nursing and care of the sick?_____
5. Do you give instruction in the lives of the health heroes?_____ Is there any concrete evidence that the children appreciate the study of these biographies?_____ If so, please list concisely such as you have observed._____
6. What health references do you have for the intermediate grades?_____ What text for the intermediate grades?_____ What references for the high school grades?_____ What text for the high school grades?_____ Are the above books and references supplemented by a supply of bulletins?_____ What series of bulletins or pamphlets do you find most helpful?_

7. Check in this list the health activities in which the pupils participate: health plays, health contests, health games, writing health stories, making health posters, keeping a record of their own health habits.
Please list any other activities in which they participate for the purpose of health education._____

8. Does your school have a health club?_____
9. Do you keep the student's grades in hygiene as in other subjects?_____How are the grades determined? (Check correct ones) Written tests, oral tests, rating pupil's health habits, rating student's interest and participation in health activities._____

10. Do pupils make satisfactory progress in the study of hygiene as a school subject?_____
11. Do you find that pupils make slow, or rapid progress in acquiring health habits? (Check correct word.)
12. Have the pupils prepared a health exhibit?_____
13. (a) Are the pupils interested in health work?___
(b) In what ways do the parents co-operate?_____

(c) What community organizations cooperate in your health program?_____

14. Are physicians called upon to give talks to students on health?_____How often?_____
What phases of health work have they emphasized?_

15. Does the school have talks on oral hygiene?_____
How often?_____

16. Does the school have talks on the care of the eyes?
_____How often?_____
17. Does the school train the children in safety and protection against accidents?_____
18. Does the school have special classes for stutterers?_____How many in your school need this speech education?_____Do you have special classes for lisping children?_____Estimate the number of such children in your school._____
19. Does the Parent-Teachers Association of your school make a study of the physical care of children?___

20. Does the school circulate cards of instruction among parents?_____

Are addresses made to the parent meetings on child hygiene?_____

21. Does the school use the newspaper as a medium to carry the health message to the home?_____
22. What course of study in health instruction does the school use?
    Title_____
    Author_____
    Publisher_____
    Address_____
23. What course of study or manual is used in safety education, if any?
    Title_____
    Author_____
    Publisher_____
    Address_____

II. HEALTH SERVICE

1. Does each child have a thorough health examination once a year?_____
2. Are the parents, or at least one of them, present at these examinations?_____
3. Does the school note and keep a record of all defects of (a) vision?_____(b) hearing?_____ (c) posture?_____(d) breathing?_____(e) and of general health?_____
4. Do you have a pre-school clinic?_____
5. Do all children of pre-school age receive a physical examination?_____
6. After all health examinations are parents directed to the family physician for remedial attention?____ Are these cases followed up to ascertain whether or not remedial treatment is given?_____Do you keep a record of the cases treated?_____About what percent of cases so referred to the family physician are treated?_____
7. Does the school give mental examinations or mental tests?_____Once every year?_____Once every two years?_____
8. Does the school make an individual health survey of every child?_____
9. Does the school weigh and measure each child?_____ Every month?_____Every quarter?_____Every half year?_____
10. Does the school keep a definite record of the child's growth?_____Of the child's weight?_____Of the results of the mental tests?_____Of the child's health history beginning with the pre-school exam-

ination?_____

11. Is there a folder or card for each child in the health department of the school?_____
12. Are the health records taken?_____Monthly?_____ Quarterly?_____Semi-annually?_____Annually?____
13. Do the weight records and health examination records show improvement in general health?_____
14. Does the school have a morning inspection to check health habits?_____
15. Do the children strive for the correction of defects?_____
16. Is the school equipped with (a) a pair of scales?____(b) tape measures or measuring rod?_____ (c) a vision chart, for vision test?_____(d) one loud ticking watch for hearing test?_____(e) one certain pole for posture test?_____(f) classroom weight charts?_____ (g) classroom records for monthly weighings and measuring children?_____
17. Do the children study their weights and compare them?_____
18. Does the school have protective and preventive measures against communicable diseases?_____
19. Is the school population well protected against (a) smallpox by vaccination?_____(b) diphtheria by toxin antitoxin?_____
20. Does the school have a (a) tuberculosis clinic?___ (b) a dental clinic?_____(c) a psychological clinic?_____(d) a central or general clinic?____ (e) a clinic for the treatment of the indigent poor?_____
21. Does the school have a medical inspector on full time?_____
22. Are his services free of charge?_____
23. Who pays for his services?_____
24. Do you have a full time health officer?_____
25. Have you a staff of public health nurses either within or without the health department?_____
26. Is the school served by a school nurse?_____
27. Is the nurse employed by (a) the board of education?_____(b) the board of health?_____ (c) other agencies?_____Please mention other agencies._____
28. Does the school have a suitable room for the nurse where her duties may be carried on?_____
29. Does the school provide individual drinking cups or sanitary drinking fountains?_____
30. Is the source of water above reproach?_____
31. Does the school have available facilities for bathing hands?_____

32. Are the paper towels furnished by the school?_____
33. Does the school have (a)sanitary toilets?_____ (b) bath rooms or showers baths to which the pupils have access?_____(c) an open air room for children of low vitality?_____(d) a partically heated open-window room (one in which the windows are kept open in all weathers)?_____ (e) adjustable seats and desks?_____(f) a well-equipped medicine chest?_____(g) a nursery school and kindergarten to supplement home care?_____(h) a full-time public service for the relief, aid, and guidance of children in special need due to poverty, misfortune, or behavior difficulties, and for the protection of children from abuse, neglect, exploitation, or moral hazard?_____
34. Do all classrooms measure up to the best standards of health in regard to temperature, ventilation, and light?_____
35. Are the study, recitation, play and rest periods carefully balanced?_____
36. Does the school make a provision for a supply of pure milk, cream, and butter for pupils who procure luncheon at the school?_____
37. Do all pupils who bring a noon lunch secure at cost one hot dish, such as a bowl of soup or a cup of cocoa to use with the lunch they carry?_____
38. Do underweight children receive milk during (a) the midmorning?_____(b) midafternoon?_____
39. Who pays for the milk supply?_____
40. Does the school have regular inspection of building premises, and drinking water to insure sanitary conditions?_____Does a physician make this inspection?_____
41. Does the school require any home work for children in the grades?_____
42. Does the school require more than (a) one half hour home work for children in the first four grades?_____(b) one hour home work for children in the upper four grades?_____(c) one and one-half hour home work for children in the high school?_____
43. Does the school cooperate between the local dispensaries and hospitals?_____
44. With what other agencies does the school cooperate in health work?_____
45. Is care taken in sweeping and cleaning the school rooms?_____

III. PHYSICAL EDUCATION ACTIVITIES

1. Does the school have (a) a department of physical education?_____(b) a gymnasium?_____(c) a swimming pool?_____(d) playground?_____(e) a tennis court?_____(f) military drill?_____ (g) a program of corrective exercises?_____ (h) a playground or shelter room into which the children may go while waiting for the doors to open in inclement weather and for play space for pupils of the primary grades in bad weather?_____
2. Is the gymnasium separated from the assembly room or auditorium?_____
3. Is the gymnasium period used in group competition between pupils of like ability in mass games, team contests, track and field events, calisthenics marching, folk dancing, and songs?_____
4. What hour of the day does the school use for the gymnasium period?_____
5. How much time do the children spend in the gymnasium per week on an average?_____
6. Does the school have a recess period (a) in the morning?_____(b) in the afternoon?_____
7. How long are the recess periods?_____
8. Do all children take part in physical activities, drills, singing games, etc., during recess?_____
9. Are the recess activities (a) directed?_____ (b) non-directed?_____
10. Is the playground adquate (a) in size?_____that is, at least 90 square feet per pupil?(b) in location?_____(c) in safety?_____
11. Does the school (a) give instruction in swimming? _____(b) prescribe gymnastic work?_____(c) prescribe athletic work?_____(d) give credit for athletic work?_____
12. What course of study does the school use in physical education?

Title_____

Author_____

Publisher_____

Please state the years for which this report replies.

_____

SIGNED_____

You may give any additional information you desire.
I thank you.

APPENDIX II

NAMES OF THE SCHOOLS INVESTIGATED

The following are the names of the Montana Catholic Schools investigated in this study.

1. St. Anne's School,
   East Helena.

2. St. Anthony's School,
   Missoula.

3. St. Benedict's School,
   Roundup.

4. Boys' Central High School,
   Butte.

5. St. Francis Xavier School,
   Missoula.

6. Fratt Memorial School,
   Billings.

7. Girls' Central High School,
   Butte.

8. St. Helena School,
   Helena.

9. Holy Rosary School,
   Bozeman.

10. Holy Savior School,
    Butte.

11. Immaculate Conception School
    Butte.

12. St. Ignatius School (Boys),
    St. Ignatius.

13. St. John the Evangelist School,
    Butte.

14. St. Joseph School,
Butte.

15. St. Joseph School,
Helena.

16. St. Jude Thaddeus School,
Havre.

17. St. Labre Mission School,
Ashland.

18. Our Lady of Guadalupe School,
Billings.

19. St. Lawrence School,
Walkerville.

20. Loyola High School (Boys),
Missoula.

21. St. Mary's Academy,
Deerlodge.

22. St. Mary's Institute,
Great Falls.

23. St. Mary's School,
Livingston.

24. St. Matthew's School,
Kalispell.

25. St. Patrick's School,
Butte.

26. St. Paul's School,
Anaconda.

27. St. Paul's Mission School (Boys),
St. Paul.

28. St. Paul's Mission School (Girls),
St. Paul.

29. St. Peter's School,
Anaconda.

30. Sacred Heart Academy,
Missoula.

31. Sacred Heart School,
Miles City.

32. St. Thomas School,
Great Falls.

33. Ursuline Academy,
Great Falls.

34. Ursuline Convent, Holy Family Mission,
Family.

35. St. Vincent Academy,
Helena.

36. Villa Ursula,
St. Ignatius.

37. St. Vincent Hospital School.
Billings.

38. St. Xavier Mission School (Boys),
St. Xavier.

APPENDIX III

AUTHORS AND PUBLISHERS OF COURSES OF STUDY USED IN MONTANA CATHOLIC SCHOOLS FOR HYGIENE INSTRUCTION

The authors and publishers of the Course of Study used in the Montana Catholic Schools for hygiene instruction are herewith given.

Title: Handbook of Health.
Author: Woods and Hutchinson.
Publisher: Houghton Mifflin Co.
Chicago, Ill.

Title: Physiology and Hygiene.
Author: Woods and Hutchinson.
Publisher: Houghton Mifflin Co.
New York.

Title: Principles of Public Health.
Author: Tuttle.
Publisher: Houghton Mifflin Co.
Chicago, Ill.

Title: Hygiene of the School Child.
Author: Terman.
Publisher: Houghton Mifflin Co.
Chicago, Ill.

Title: Course of Study in Hygiene.
Issuer: State Department of Education,
Columbus, Ohio.

Title: 1923 Montana Course of Study for Rural Schools.
Issuer: State Department of Public Instruction.
Helena, Montana.
Publisher: Missoulian Publishing Co.
Missoula, Montana.

Title: 1924 State Course of Study for Montana City Elementary Schools.
Issuer: State Department of Public Instruction. Helena, Montana.

Title: 1931 Montana Course of Study for Elementary Schools.
Issuer: State Department of Public Instruction.
Publisher: Tribune Printing and Supply Co. Great Falls, Montana.
Price: $2.00

Title: Indian Course of Study.
Author: Not reported.
Publisher: Not reported.

APPENDIX IV

AUTHORS AND PUBLISHERS OF COURSES OF STUDY USED IN MONTANA CATHOLIC SCHOOLS FOR SAFETY INSTRUCTION

The author and publisher of the Course of Study used for Safety Education in the Montana Catholic Schools are the following.

Title:	1921 Course of Study for Safety Education in Oregon Schools.
Issuer:	J. A. Churchill, Superintendent of Public Instruction for Oregon.
Printer:	State Printing Department. Salem, Oregon.

Title:	Course of Study for Montana Elementary Schools.
Issuer:	State Department of Public Instruction.
Publisher:	Tribune Printing and Supply Co. Great Falls, Montana

Title:	First Aid Chart.
Author:	Not reported.
Publisher:	Not reported. (These charts were donated by a local druggist).

Title:	Social Science.
Author:	Harold Rugg.
Publisher:	Bureau of Publication. Teachers' College. New York.

APPENDIX V

BOOKS AND BULLETINS RECOMMENDED BY THE MONTANA 1923 COURSES OF STUDY FOR RURAL SCHOOLS AND BY THE 1924 COURSES OF STUDY FOR MONTANA CITY ELEMENTARY SCHOOLS

The following books and bulletins for health instruction are recommended by the 1923 Course of Study for the Rural Schools of Montana prepared by the State Department of Public Instruction, Helena, Montana, and printed by the Missoulian Publishing Company, Missoula Montana. They are also recommended by the 1924 State Course of Study for the Montana City Elementary Schools likewise prepared by the State Department of Public Instruction, and printed by the Independent Publishing Company, Helena, Montana.

... American Red Cross Abridged Text Book in First Aid.

... Boy Scout Book

Andress:
Health Education in Rural Schools

Bancroft:
Games for the playground, Home, and School

Carney:
Country Life and the Country School

Conn:
Elementary Physiology and Hygiene

Curtis:
Play and Recreation in the Open Country

Ferguson:
A Child's Book of the Teeth

Farnsworth:
The Rural School Lunch
Webbs Publishing Co., St. Paul; 20 cents.

Gregg:
Hygiene as Nature Study

Gulick:
Emergencies

Hoag:
Organized Health Work in Schools

Hoag and Terman:
Health Work in the Schools

Hutchinson:
A Handbook of Health
Community Hygiene

Jewett:
The Body at Work
Physiology, Hygiene, and Sanitation
Town and City
Good Health

Kern:
Among Country Schools

Kinne and Cooley:
The Home and the Family
Food and Health
Clothing and Health

O'Shea and Kellogg:
The Body and Health
Making the Most of Life
Health Habits
Health and Cleanliness

Overton:
General Hygiene

Ritchie:
Primer of Sanitation and Hygiene

Tuttle:
Principles of Public Health

Wiley:
Health Reader

Wood:
Essentials of Health for School Children

Bulletins

Bulletin from the Montana State Board of Health:
Scarlet Fever

Bulletins from Teachers' College, Columbia University, New York:
Rose, Food for Boys and Girls: 10 cents
Rose, The Feeding of Young Children; 10 cents
Rose, Some Food Facts to Help the Housewife in the Family; 5 cents

Bulletin No. 712 State Relation Service, Dept. of Agriculture, Washington:
School Lunches

Bulletin from State Normal School, Emporia, Kansas:
Plays and Games Number

Bulletin from State Board of Health, Helena:
Board of Health Public Health Laws and Regulations

Bulletin No. 2 from State Department of Health, Albany, N. Y.;
Regulations for Disinfectants; 2 cents

Bulletin published by the Helena Club:
Berharz:
Waste Collection and Disposal

Bulletin No. 17, Department of Education, Sacramento, California:
Disposal of Sewage in Rural School Districts

Bulletin No. 270:
Modern Conveniences in the Farm Home

Circular No. 1, State Department of Health, Albany, N. Y.:
The Filthy Fly; 2 cents

Farmer's Bulletins:
No. 63, The Care of Milk on the Farm
No. 602, The Production of Clean Milk
No. 377, Harmfulness of Headache Mixtures
No. 473, The Sanitary Privy

Ford:
The Case Against the Little White Slaver

Holt:
Standards of Nutrition and Growth

Wood:
Health Charts

Wood:
Health Essentials for Rural School Children

Poster from State Board of Health:
Regulations for Dairies

Classroom Weight Record Chart; Child Health Organization, 289 Fourth Ave., New York

APPENDIX VI

BASAL TEXTS ADOPTED FOR MONTANA ELEMENTARY SCHOOLS

The 1931 Course of Study for the Elementary School issued by the State Department of Instruction and published by the Tribune Printing Supply Company, Great Falls, Montana, gives on pages 728 and 729, the basal texts adopted for Grades I and VII inclusive.

They are as follows:

A. Health instruction

My Health Habits; Whitcomb-Beveridege-Townsend; First, Second, Third grades; Rand McNally and Company

A teacher's manual accompanies this set, giving lessons outlined in detail by weeks and months for the entire eight grades

In training for Health; Turner-Pinckney; Fourth Grade; D. C. Heath and Company

Health; Turner-collins; Fifth Grades; D. C. Heath and Company

The Way to Keep Well and The Human Body and Its Care, for Grades Six and Seven; Newmayer and Broome; American Book Company

A teaching manual accompanies each of these texts, giving lessons outlined in detail

B. Physical education

Physical Education for Elementary Schools; all grades; Neilson and Van Hagen; A. S. Barnes and Company, New York

APPENDIX VII

AUTHORS AND PUBLISHERS OF COURSES OF STUDY USED IN MONTANA CATHOLIC SCHOOLS FOR PHYSICAL EDUCATION

The authors and publishers of the Courses of study used in the Montana Catholic Schools for physical education are as follows.

...	Course prescribed by the Eastern State Normal School, Billings, Montana
Author:	Miss Stevens
Publisher:	Eastern State Normal School Billings, Montana
Title:	Tumbling, Scepter Swinging, Dancing
Author:	Br. P. G. MacMahon
Publisher:	Christian Brothers Butte, Montana
Title:	Community Course; Graded Set of Exercises for Grades I - VIII
Author:	Sisters of Charity of Leavenworth
Publisher:	Sisters of Charity Leavenworth, Kansas
Title:	Physical Education for Elementary Schools
Author:	Neilson and Van Hagen
Publisher:	Barns and Company New York
Title:	1924 State Course of Study for Montana City Elementary Schools
Issuer:	State Department of Public Instruction, Helena, Montana
Publisher:	Independent Publishing Company Helena, Montana

Title:	1931 State Course of Study for Elementary Schools
Author:	State Department of Public Instruction, Helena, Montana
Publisher:	Tribune Printing and Supply Company, Great Falls, Montana

APPENDIX VIII

REPORT SUBMITTED TO THE WHITE HOUSE CONFERENCE ON CHILD HEALTH AND PROTECTION

THE EDUCATIONAL FACILITIES FOR CRIPPLED CHILDREN IN MONTANA

By Miss Meek--Member of the White House Committee[1]

How the work started

"The state of Montana is fortunate to have had a man to meet its need in the care of crippled children. In 1916 infantile paralysis in its most virulent form swept over Yellowstone county, leaving in its wake great number of badly crippled victims. Dr. Louis W. Allard, with the aid of the Sisters of Charity at St. Vincent's Hospital, and the Billings Women's Club made Billings a center for treatment of cases from Montana, Wyoming, and western North and South Dakota. Though the hospital had at that time only fifty beds, the worst cases were given space and wonderful results followed. The work was interrupted by the war, for Dr. Allard was appointed general health officer for the county.

"In 1920 there was opportunity to turn again to the rehabilitation of these children, and a great many received treatment. Thirty-three hospital cases received some sort of bedside teaching from volunteer teachers from the city schools, who divided them roughly into grades and did some group teaching in the wards and the corridors. So eagerly did the pupils respond to the offered teaching that some of

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1. The writer is under the impression that this is unpublished material.

them completed three grades in the year, and many did the equivalent of one and a half years of work. These gratifying results showed plainly that school training must be a regular part of the orthopedic program. Many of the children were so afflicted that they had been unable to go to the public schools in their own community, and they were growing up in entire ignorance. An attempt was made to send a few of the most physically fit to the neighboring public school, but after about three weeks of attendance they began to lose ground physically. Apparently their nervous systems could not stand the competition with normal children. The constant feeling of being "different" wore down their spirits, too, and they grew shy and morose. Therefore the plan of giving classes at the hospital was continued.

Federation of Women's Clubs Obtain State Aid

"Up to this time all the work had been supported as a local charity, but through the enthusiasm of the Billings Women's Clubs, the matter was brought before the State Federation of Women's Clubs. This organization sponsored a bill asking for state aid in the work and it was presented before the legislature in 1921.

"The legislators were not favorable to it when it was first presented. It is a thrilling story--the account of how the indomitable enthusiasm of Dr. Allard and Sister Arcadia refused to accept the possibility of defeat of the bill. With one night and one day to do the work before the bill was voted on, they planned a folder containing pictures of patients taken before and after treatment, presenting the facts to make clear the pictures and explaining the hospital classes. A photographer did the picture work, the Gazette printing office printed the folders, and they were sent on the night train to Helena, where Mrs. R. C. Dillavou, who was lobbying for the bill, had them placed on every legislator's desk next morning, a concrete proff of the wonderful service which was

already being rendered. Needless to say, the bill passed, and $25,000 was appropriated for the biennium, though the state was committed to a policy of retrenchment in every branch of work. An appropriation for this work has been renewed by each succeeding legislature.

Cases Located by Clinics

"Since that time, Dr. Allard has been building up the state organization, utilizing the service clubs, women's organizations and every available philanthropic agency, as well as private benefactions, to enlarge the scope of the work.

"In Glendive, Bozeman, Butte, Eureka, Kalispel, Missoula, Anaconda, Havre, and Malta clinics were held, at which all the crippled children from the surrounding country were examined by Dr. Allard. The worst cases were sent to Billings for treatment. By this method he was able to sift out the spastic paralysis cases and others which would not yield to treatment, and to devote his attention to those he could materially help.

"At Butte, a mining center with many laboring men's families, an auxiliary clinic was extablished, and the city took on the financial burden for their crippled children. Many of them were treated at Butte by the physio-therapy nurse and attending physicians. But the operative cases were sent to Billings. The city of Billings has put on a drive each year, which brings $10,000 or more to the fund. With this sum all the Yellowstone county cases and any others which no other agency cares for are financed, but Dr. Allard donates his services for these children.

School Facilities Enlarged

"In 1923 the new St. Vincent's Hospital was built, with up-to-date equipment for all orthopedic work. The old building in another part of the city was given over to the hospital school. With these increased facilities the sisters continued their policy of charging only the actual per capita expense for maintenance at both hospital and school. As soon as a child could be put in a wheeled chair or on crutches he was sent to the St. Vincent's Hospital-School, where a nurse trained in physio-therapy continued the muscle re-education while he was receiving the regular elementary school training.

"These handicapped little children found themselves in a new world--a world in which they were not different from other children. Twisted legs, wry necks, paralyzed muscles were no longer a mark of shame. Under the loving and understanding care of the devoted sisters they experienced the joys of companionship and happy school life. Their fund of experiences was daily enriched and they learned many useful things besides their lessons. Such surroundings did much to fit them to become useful members of society; a temperamental adjustment to life is as necessary as is a physical or mental adjustment.

"During the years 1924-1930 the average attendance at the Hospital-School has varied from fifty to seventy-five. The cases have been accepted without regard to race, color, or financial conditions. The only requirement has been that each child be mentally (70 percent mentality is the minimum) and physically capable of being benefited by the service of the institution. Though the need for vocational education to fit these children to be bread-earners is fully realized, no such work has been in corporated in the school course as yet. As soon as funds are available for any extension of the present work a beginning will be made. Typing has been introduced through co-operation with the state rehabilitation officer and seven pupils have been trained in

this work. Some art training has been offered by the aid of a student-teacher from the Eastern Montana Normal School, located at Billings. In the fall of 1930 another full-time teacher will be employed.

Number of Cases in Five Years

"A review of the case records, on file, for the years 1925-1930 reveals that St. Vincent's Orthopedic Hospital-School clinic has examined over 2125 cases from 258 cities in the 56 counties of Montana and nineteen other states, not including a few cases from Alaska, Canada, and Italy. These cases represented every type of congenital or acquired deformity, ages ranging from infancy to maturity. A large percent have been cared for through the out-patient department, but 1176 cases have been institutionalized for operation or special treatment in the hospital-school, the period of care varying from three weeks to several years".

APPENDIX IX

HEALTH EDUCATION INSTITUTES AT ST. LOUIS AND SYRACUSE[1]

"Two notable events of the past month were the health institutes conducted in the Archdiocese of St. Louis and the diocese of Syracuse. Both gatherings were under the immediate supervision of the school officials directly responsible for their inauguration, namely, Father James P. Murray, diocesan superintendent of Schools of St. Louis, and Reverend Charles M. Coveney, superintendent of schools of Syracuse. The gathering in St. Louis--the first to be devoted exclusively to health problems--held on August 26 and 27, was conducted under the auspices of the St. Louis University School of Medicine and the St. Louis Tuberculosis Society. Over 800 Sisters were in attendance. The topics discussed were: Respiratory Diseases; Diet and Health; Tonsils and Adenoids; Care of the Eyes; Health Menace of Patent Medicines; Dental Hygiene; History of the Health Education Movement; Classroom Methods of Teaching Health, Mothers' Clubs and Milk Stations.

"His Grace Archbishop Glennon attended the last session and spoke to the assembled Sisters concerning the vital need of health education in the parochial schools today, paying high tribute to the health work now being conducted in St. Louis.

"A similar meeting was called by Reverend Father Coveney in Syracuse after the reopening of the parish schools. Over 200 Sisters cooperating with the Health Demonstration attended.

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1. National Catholic Welfare Conference Bulletin ed. by Charles A. McMahon (Washington D.C., 1925) Vol. 7, No. 5, p. 20

"Lectures on methods of instruction in health education and the history of the health education movement were given at both St. Louis and Syracuse by Miss Mary E. Spencer, Health Education Specialist of the N. C. W. C. Bureau of Education.

APPENDIX X

HEALTH WORK IN THE LOS ANGELES SCHOOLS

Rev. Peter Corcoran Issues Annual Report of Diocese and Emphasized the Importance of and the Spread of Adequate Health Program

"A voluminous report of 117 pages has been issued by Rev. Peter Corcoran, superintendent of schools of the Diocese of Los Angeles and San Diego. The report is among the most attractive, complete and interesting that has appeared. Beautiful illustrations of the complete Catholic school system of the Diocese, not only of the school structures, but of many of the splendidly equipped class rooms of the high schools, as well as many of the Sisters' convents.

"Fr. Corcoran in his report covers the complete work of the Diocesan schools. Of particular interest just now is his report on the system of medical inspection in force in the Los Angeles schools.

> 'The awakened interest in public health work, especially in recent years,' says Fr. Corcoran in his report, 'has been remarkable and much progress has been made toward improving the physical and mental condition of the school children. In many cities this important matter of health inspection is directly under the supervision of the Board of Health; in others,

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1. Catholic School Interests ed. by Rev. John A. O'Brien, Ph. D., (Elmhurst Ill. 1925) Vol. lV, No. lll, p. 96-98.

as in Los Angeles, a special department has been created for public schools.

'Physicians are employed to examine all children who enter schools and make necessary re-examination afterwards. Parents are acquainted by letter of physical defects in their children and are advised to consult their family physician or procure treatment at clinics. School nurses are also employed to make home visits when children are absent from school owing to some disease. They also do valuable work by what is known as "follow-up work" in case parents fail to correct defects certified by the school physician.

'Work of the above nature has been carried out, especially in out outside schools, for some years past and we hope in a future report to publish a detailed account concerning it.

'The Board of Public Health and the Los Angeles Tuberculosis Association, notwithstanding their many urgent duties, have been generous in their treatment of our city schools.

'Public health nurses have co-operated with local physicians, who generously donated their services to a detailed examination of the children.

'The following report of the special health and nutrition work done at Our Lady of Lourdes School by the Los Angeles Tuberculosis Association clearly indicated the necessity of medical supervision and treatment of school children. Work of this nature was also extensively carried out in Holy Cross

School. The Reverend Director of the Bureau of Catholic Charities rendered valuable assistance and encouragement.'

STATISTICAL REPORT
OF OUR LADY OF LOURDES SCHOOL--

JANUARY 15 TO MAY 31, 1924.

Number of visits to school.....	25
Number of conferences with teachers..	36
Number of home visits.....	27
Number of talks to rooms or groups of children.....	14
Number of children inspected.....	356
Number of children weighed and measured.....	356
Number of children normal weight.....	239
Number of children 7 per cent under weight.....	117
Number of children defects found--	
Tonsils.....	180
Teeth.....	20
Enlarged cervical glands.....	29
Heart (these children were examined by Dr. Brown at clinics and are now under treatment).....	4
Condition found in schools and excluded--	
Pink eye.....	6
Measles.....	1
Mumps.....	1
Impetigo.....	5
Scabies.....	2
Child with temperature of 103...	1
Number of school children examined by Dr. Brown.....	16
Number of school children vaccinated.	238
Number of school children whose vaccination dressings done in school.....	328
Corrections--T. & A.....	11
Dental.....	25
Appointments made at hospital for T. & A. during summer months....	6

"During period between March 14 and September 11, 21 Well Baby Conferences have been conducted, at which 65 children under one year of age were examined, 38 between the ages of one and six years, and 32 children over six years--or of school age; making a total attendance at all the conferences combined of 135, or an average attendance of 6.4 children at each conference."

APPENDIX XI

HEALTH WORK IN THE PAROCHIAL SCHOOLS OF THE ARCHDIOCESE OF SAN FRANCISCO

by Thomas D. Maher, M. D.,[1]
Director of Child Welfare,
San Francisco Health Department

"The administration of health work in all the San Francisco schools, public and parochial, is under the jurisdiction of the Health Department because all such activities are regarded as the very essence of preventive medicine.

"Orgainized in the year 1908 with one school physician and six school nurses, the present force now engaged in health work in schools consists of one Director of Child Welfare, four school physicians, twenty-one school nurses, and three nutrition workers.

"In 1916 it became evident to the Board of Health that a system of health inspection that did not include the ten thousand children attending Parochial Schools was inefficient and should be remedied. The idea found favor with the Catholic School authorities, and received approval of the Most Reverend Archbishop Edward J. Hanna. All pastors and superiors were not agreed at first as to the wisdom of this action. All, indeed, approved of the principle of medical inspection, but fears were entertained by some that in its administration the schools would be subjected to annoyance from the officiousness of the inspectors. Their anxiety, however, was relieved when the policy of the Board of Health was enunciated in the following words:

> 'Health work is being extended to the parochial schools as a means to augment the efficiency of modern

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1. Catholic School Interests ed. by A. C. Monahan and Rev. John A. O'Brien, Ph. D. (Oak Park, Ill. 1924) Vol. 11, No. XI. p. 13.

educational methods, and will not in any conceivable way, interfere with established rules.'

The work has been carried on for six years, and the results have been eminently satisfactory.

"In a recent report of the Reverend Ralph Hunt, Superintendent of Parochial Schools, the statement is made that health work in the parochial schools as conducted by the city Health Department, is hailed as a blessing by the schools, not only for the protection whcih it affords the children, but also because of the grave responsibilities which it lifts from the teachers and pastors.

"During the fiscal year ended June 30, 1923, two thousand and seventeen routine physical examinations were made in twelve different parochial schools and were correctable physical defects were discovered, parents were accordingly advised as to institution of proper treatment. Seven hundred and twenty-six constructive home visits were made to homes in connection with physical defects found in children. The records show that one hundred and sixty-two children were operated on for hypertrophied tonsils and adenoids, and that approximately one hundred children had defective vision corrected. One hundred and fifty children were referred to the municipal dental clinic for treatment and proper advice in oral hygiene.

"Plans have now been practically consummated, in at least four parochial schools, for the inauguration of a supplementary mid-morning lunch consisting of a half pint of milk and crackers for all children of the under-nourished type. Many data are at hand that prove the efficacy of such a program in combatting and preventing the malnutrition so prevalent among school children.

"The Health Officer, Doctor Wm. C. Hassler, has always looked with favor on the assignment of a full time school physician to the parochial schools exclusively, to

make routine physical examinations in the many schools where such an activity is anxiously awaited; and it is more than likely that the necessary funds will soon be obtained for this specific purpose.

"Cognizant that health work in schools is one of its most important functions, the Board of Health is anxious to improve the efficiency of its present system and aims to increase the present corps of school physicians and nurses, to augment the present number of school dental clinics, to establish cardiac clinics, to employ additional dental hygienists as quickly as such service is available, to further expand nutrition work, all in the development of a constructive health program for the ensuing year.

"That the parochial school system will co-operate and freely participate in this community health development there can be no question."

APPENDIX XII

HEALTH EDUCATION PROGRAMS IN CATHOLIC SCHOOLS

by Mary E. Spencer[1]

"The trend of events in any field can be seen in proper perspective only when we look back over a period of some years. Organized health work in Catholic schools is too new to admit of generalizations in this regard, but the variety of ways in which Catholic educators are meeting their problems in health education is not only indicative of a healthful outlook, but holds rich promise of greater achievements in the immediate future. Accounts of new health education achievements have come from many sources, but because of space limitation only a few which are typical can be recorded.

"Health work of a most practical kind has been carried on in St. Louis for the last few years. It was started in a very simple way in 1921 by the local Tuberculosis Association, assisted by a volunteer committee of Catholic women. From the very outset it received the hearty endorsement and ready cooperation of His Grace, Archbishop Glennon, and of Rev. James P. Murray, superintendent of parochial schools. A director of health education was furnished by the Tuberculosis Association to carry out the program.

Health Education Idea Had to Be Sold

"In the pioneer days the health education idea had to be sold to schools, parents and children alike. But that it has sold well is evidenced by the expansion of the program from medical supervision by volunteer parish physi-

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1. National Catholic Welfare Conference Bulletin ed. by Charles A. McMahon (Washington D. C. 1925) Vol. VII, No. 3, p. 19-20

cians to a full and complete health program for 66 parochial schools during the school year 1924-1925. The high points of the program are as follows: Health instruction with emphasis on the acquisition of health habits is generally carried on in all the schools; more than 1,000 classroom health talks have been given by the parochial school health worker; talks have also been given to the Sisters and at Mothers' Clubs; three schools have special nutrition classes for delicate children; a health contest, in which about 10,000 children take part, is conducted annually to determine the school having the highest percentage of children up to normal weight. With the opening of the new school year the N.C.W.C. Course of Study in Health Education is to be adopted by every school in the archdiocese.

St. Louis Schools Doing Fine Work

"The situation in the St. Louis schools is a splendid illustration of what is possible with wholehearted cooperation, especially among volunteer groups and agencies. The St. Louis Tuberculosis Association pays the salary of the health director who cares for the administrative details connected with the conduct of the health teaching program. Members of the Parochial Dental Welfare Association, an organization including Catholic dentists of the city, examine the teeth of all parochial school children annually, while a number of Catholic doctors volunteer their service for the health examinations. Milk stations increased 300 percent in number in three years, due to the support of the Mothers' Clubs promoted by the Archdiocesan Council of Catholic Women. The National Dairy Council assisted in the establishment of this milk service, cooperated in conducting the special nutrition classes and staged health plays in many schools. Special service was rendered by the volunteer Committee of the I. F. C. A. in weighing and measuring the children in the schools, 18,000 being cared for last year; and also in supplying valuable clerical assistance to the various health workers.

"In Syracuse, N. Y., the parochial school health problem is met in still another way. Here the parochial schools play an active part in the Syracuse Health Demonstration, financed by the city and the Milbank Memorial Fund. In 1923 a young woman was appointed health education director for parochial schools. The health supervision is in charge of a medical supervisor, three part-time physicians, four nurses and a dental hygienist. Through the director of health education the Knights of Columbus have been interested in caring for the needs of Catholic children afflicted with sight defects. An oculist is employed by this organization for examinations and in many instances glasses are also supplied without cost. In addition to careful follow-up work and correction of defects the Syracuse program has included weighing and measuring, health instruction in all schools, health talks to the pupils and Sisters by the director, field trips in connection with the health instruction, the use of the morning health inspection, health posters, health plays, and health films as special features of the educational program. Statistics might be quoted to show the superior kind of work carried on in this city and the excellent results attained, but only an actual classroom visit or a talk with those in charge would really serve this purpose--would effectively portray the story of lives which are different because the parochial school authorities consider the physical as well as the spiritual and mental development of the individual child.

Rochester, N. Y., School's Accomplishments

"An outstanding piece of health work in a single school, as distinguished from the diocesan or city types recounted above, is the six months' health demonstration carried on in St. Andrew's parochial school, Rochester, N. Y. It was begun last November by the Tuberculosis and Public Health Association of Rochester at the request of the pastor. During the first week a height-weight survey of the school pupils was carried out. After the medical

examinations had been completed by the Health Bureau, a special study of the findings was made and every Sister given a health record sheet to familiarize her with the physical condition of her youthful charges. From the first of February every Sister kept a special record of all absences due to illness; 170 of these special cases were investigated and a program set in motion to reduce absences due to communicable diseases, colds, etc. To promote the eradication of communicable diseases the Schick test for diphtheria and the Dick test for scarlet fever were generally given. Special nutrition classes were established for primary children and others for those in the middle grades. The morning inspection for cleanliness and neatness was made a daily feature and weighing carried on bimonthly. A hot noon lunch was served daily for two cents and milk could be purchased in half-pint bottles at 10 a. m. In the seventh and eighth grades a Girls' Club was formed for those who wished to come up to standard. Special emphasis was placed on posture work. About the most noteworthy feature of this remarkable piece of health work was the splendid home cooperation--on which not a little of the success of the program depended. In this particular school 171 corrections were recommended and 108, or 63 percent, were carried out almost immediately. Of the others 12 percent promised correction during the summer.

"The prize for home cooperation, however, should be awarded to St. Mary's parochial school at Fargo, N. D. During one week of last term 96 children received a complete physical examination and 96 mothers were present at these examinations, a remarkable record achieved through the pastor's efforts. Previous to the assigned dates he sent a personal letter to every mother having children in his school, urging them to sttend. With such interest the success of health work at St. Mary's is assured.

"During the past winter, at the quarterly conferences for the religious teachers of the

Brooklyn diocese, a special study was made of the field of health education at the suggestion of the diocesan superintendent. Sisters from various communities in the diocese prepared papers to be read at these meetings. The following are suggestive of the topics treated: The Necessity of Personal Health Care in the Teacher; the State Law on Physical Education; Health Conditions in a Well Managed School; Fundamental Health Habits for School Children and Methods of Health Instruction in Elementary and Secondary Schools.

Teaching Orders Train for Health Work

"The Sisters of St. Louis will come together for a two-day Health Institute the last week in August. The first day's program will include eight physicians from the St. Louis University Medical School and will treat of subject-matter which the teacher should possess as a background for her classroom teaching. The second day has been arranged by the St. Louis Tuberculosis Society and its papers and discussions will center around the mechanics of health teaching.

"Communities as well as diocesan groups are training their members to meet their new responsibilities in the health field. Some work along this line has been done at the mother-house of the Sisters of St. Joseph at Chestnut Hill, Pa., during the past year, and a special course in health education taught by one of the Sisters is now being given at the summer school there.

"Fordham University through its extension department is planning an accredited course in health education for religious teachers for the coming year, and Sisters College, Catholic University, is now considering the advisability of offering an elective course in the subject-matter and methods of modern health education. If this course is decided on it will be given twice weekly for the entire year, with proper credit toward the A. B. degree."

APPENDIX XIII

SOME EXAMPLES OF HELPFUL COOPERATION[1]

"How have some other Catholic clubs done it? In Canton, Ohio, school nursing organized and financed by the Catholic Community League was begun in five parochial schools in October, 1922. One full-time nurse and a part-time doctor were employed. The nurse conducted a part of the physical examination and also visited the homes in order to induce the parents to have the defects corrected. Where the expense of such medical attention would work a hardship, arrangements were made to care for the child at the city clinic or Catholic hospital free of charge. Sometimes the Catholic Community League paid the entire bill and the parents refunded in installments. This particular Catholic Community League also bore the expense of giving the Schick test and the Toxin-antitoxin treatment to the parochial school children during the prevalence of diphtheria in that city.

"The Parochial School Volunteer Committee of St. Louis, M., weighed and measured 16,692 children in 29 parochial schools, made 90 school visits in these schools, and rendered clerical assistance in three parochial school nutrition classes for a period of twenty weeks in 1924. Mothers' Clubs have been formed in several of these schools and have developed into a splendid auxiliary for the health work in the schools where they were established. The interest of similar groups in other parishes has been aroused by their activities.

"For four years the doctors of the Guild of St. Appolonia, in Boston, have carried out their program in forty-two parochial schools. Members of the Guild have treated 32,949 children. The Parochial School Dental Welfare Association of St. Louis has given dental

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1. Op. Cit. Vol. VI, No. 10, p. 11

examinations to practically all of the parochial school children of that city and has handled the entire routine without assistance from any other organization.

"An interesting piece of health work has been done by the Archdiocesan Council of Catholic Women in Portland, Oregon, which has secured a nursing service from the Visiting Nurses Association for several of the parochial schools of Portland. At the organization of the Archdiocesan Council, the health of parochial school children was made a feature of their program.

"Through the New London Council of Catholic Women, a vacation period in private homes was secured for twenty under-nourished children from the Bronx."

APPENDIX XIV

BULLETINS AND PAMPHLETS WHERE OBTAINABLE

Health bulletins and pamphlets may be obtained from the following.

American Childhood Association
174 Park St.
Springfield, Mass.

American Medical Association
535 N. Dearborn St.
Chicago, Ill.

Brown Shoe Co.
St. Louis, Mo.

Child Welfare Association
1201 16th St. N.W.
Washington, D.C.

Cleanliness Institute
Dept. 6 M
45 E - 17th St.
New York, N.Y.

Dairy Council
Chicago, Ill.

Department of the Interior
Bureau of Education
Washington, D.C.

Evaporated Milk Association
203 N. Wabash Ave.
Chicago, Ill.

General Mills, Inc.
Minneapolis, Minn.

Gold Medal Foods, Inc.
Minneapolis, Minn.

Metropolitan Life Insurance Co.
HOME OFFICE - NEW YORK
Pacific Coast Head Office - San Francisco

State Health Department
Helena, Montana

The Quaker Oats Co.
School Health Service
80 E. Jackson St.
Chicago, Ill.

The Wheatena Corporation
Wheatenaville
Rahway, N.J.

The Welfare Division of the Metropolitan Life Insurance Company will send any four of the following booklets on request.[1] Write to the

Welfare Division
Metropolitan Life Insurance Company
1 Madison Avenue, New York

or to the
Pacific Coast Head Office
San Francisco

PERSONAL AND COMMUNITY HEALTH

Artificial Respiration
Cancer- A Message of Hope
Conquest of Typhoid Fever
Diabetes
Dyskinesia (Constipation)
Eyesight and Health
Foot Health
Get Rid of Rats
Simple Goiter
Good Teeth
Hook Worm Disease
Importance of Posture
Is Your Child Safe Today?
Just a Cold? -
Malaria
Overweight and Underweight
Pellagra
What is Rheumatism?
Give Your Heart a Chance

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1. ... Health Happiness and Long Life; Metropolitan Life Insurance Co. Pamphlet, p. 22 - 23.

Tuberculosis
Vaccination Protects You Against Smallpox

HEALTH OF MOTHER AND BABY

Baby's First Book
Baby's First Days
Flies or Babies, Which?
Information for Expectant Mothers
Rickets and Scurvy
The Child

CHILD HEALTH

A B C Book
Diphtheria
Helpful Suggestions About Infantile Paralysis
Measles
Metropolitan Mother Goose
Out of Babyhood Into Childhood
Scarlet Fever
So Is the Tree Inclined
Tonsils and Adenoids
The Prize Winner (Diphtheria)
Whooping Cough

FAMILY HEALTH

First Aid in the Home
The Family Food Supply
All About Milk
Metropolitan Cook Book

FOR TEACHERS

Art and Health
The Janitor and the School Child
Health Heroes --
    1. Pasteur
    2. Trudeau
    3. Jenner
    4. Reed
    5. Nightingale
Some Ways of Using the Health Heroes Series
Monographs --
    1. A Practical School Health Program

2. Diphtheria Immunization in Schools
3. Handwashing Facilities in Schools
4. The Teacher's Health
